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PROFITS AND BALANCE SHEET ADJUSTMENTS

BY

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PREFACE

THE profits of a business may be simply defined, but their measure or computation imports difficulties of definition and of canons of measurement. These difficulties lead to variation of accounting expression, and result in the application of methods of adjustment of computations which, whilst they are described as following "prudential" maxims, are largely the result of empiricism.

The facts of business so interact, indeed, that many incidental principles of accounting adjustment are subordinated to over-riding or total considerations. Factors tend to offset, or, on the contrary, to support each other, so that the profit computation may represent a resultant of adjustments made under the dictation of views varying from so-called scientific formulae to the extremes of forecast of possible realizations at uncertain future dates.

The underlying principles of safe accounting measurement are designed to secure the continuity of the business entity, but the variation of emphasis within the forecast of margins of risk leads not only to variation in quantitative expression but even to variation in the manner or description of accounting statements. This variation of manner may include "secret" adjustments as well as "open" adjustments, whilst "open" adjustments may conceal the factors deciding the selection of their measurement.

"Profit adjustments" therefore follow little common plan except that understatement of profit tends to be accepted as an accounting virtue. The factors demanding such adjustments, however, are real and not

incapable of measurement within limits. The purpose of this book is to examine this reality, to separate those adjustments which may be calculated by measurable factors from those based upon opinions, or hopes, or even fears. Common practices are considered critically and not accepted as justified merely because they are common.

The text approaches the problems of reserves, sinking funds, and depreciation funds from an unusual, if not a new, angle of view, viz. their relationship to circulating capital and its utilization. Rules of valuation are reconsidered from this angle of view even if common rules are found confirmed and so restated.

The interpretation of a balance sheet as a survey of a business as a going concern is thus subjected to a variation in the technique of criticism.

The book is based on notes of lectures given for the past few years by the writer to students (taking a degree in Commerce at the University of Liverpool), as foundation studies in a course in advanced accounting, and have been proved to lead to a sound grasp of accounting methods and principles.

The writer acknowledges his indebtedness to Professor E. R. Dewsnup, M.A., Chaddock Professor of Commerce, University of Liverpool, who has encouraged him to present accounting science to his students as a study of method and of interpretation rather than a study of accepted forms, routine, and formulae. The subject-matter of this book is part of this study which may, it is hoped, lead to a more extensive treatment at a later date.

P. T.

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PROFITS AND BALANCE SHEET ADJUSTMENTS

CHAPTER I

CIRCULATING CAPITAL AND PROFITS

ARGUMENT. *Profit attaches itself to the available circulating capital, and the incidents affecting circulating capital bear on the computation of profit available for distribution.*

1. **Capital.** Capital expressed as a term of accounting is a statement of quantity and so measures the proprietorship of the capital holders in a business. Enlargement on this statement will be found in the further detail of this book. The generalization alone is required at present, viz. that capital is a measure of ownership expressed in terms of money.

The accounting notion of capital is not a summation of things or forms of wealth, but a measurement of ownership attaching to things or wealth after allowance for the settlement of any prior demands to be satisfied out of such wealth when converted into money.

Liabilities are demands to be satisfied out of things or wealth, but are distinguished from capital by the relatively settled measure of their demand, and the priority of such demand over that of the "capital liabilities."

Liabilities (such as debentures, loans, etc.) may, however, be subject to long term repayment, or to

repayment following prescribed incidents and thus be "continuing," or "fixed." Thus some liabilities are incurred to finance "capital" (or continuing) circumstances, i.e. to serve the same initial purpose as is served by capital proper. Such "fixed liabilities" are sometimes called capital loans or "loan capital." Publicly owned undertakings are almost entirely financed with loan capital.

The priority of liabilities over capital in the matter of repayment justifies the general accounting definition of capital as the excess of the value of assets (i.e. things, rights, privileges, and advantages) over the amount of liabilities. But the term "capital" is sometimes loosely applied, so that in some statements of capital computations, *fixed* liabilities may be—

(a) Included among the deductions from assets to compute "Proprietors' Capital"; or

(b) Excluded from the deductions from assets to compute "Invested Capital."

The financial figures taken into capital computations as the value of assets are, of course, dependent upon notions of valuation which may vary in regard to different types of assets. These notions will be dealt with hereafter.

Again, liability expressions may include contingent demands and reserves subject to accrual and verification, and these involve further principles of interpretation to be considered in this text.

2. **Contributed Capital.** The first measure of capital to be considered is the amount actually subscribed in cash or as value in exchange (i.e. under contract). It is convenient for the text to consider such contributions to have been made at one time, though under practical conditions these contributions will be found usually to be the result of a series of transactions.

Contributed capital includes the contributions by proprietors or shareholders and placed at risk in the business operations. This part will be measured in terms of the money subscribed or in measure of things equated to money under a vending contract. Contributed capital may also include "Loan Capital."

The capital so provided will be applied to the—

(a) Acquisition of continuing things tangible (fixed assets, otherwise called capital assets).

(b) Acquisition of continuing rights, privileges, and advantages of an intangible nature. (These are also fixed assets, but sometimes are styled "Fictitious" capital assets).

(c) Circulation operations, i.e. things, services, and costs passing into forms of wealth intended for conversion into money values.

• We shall now view, in its accounting form, a balance sheet containing a summary of the transactions of a new business about to commence profit earning operations.

BALANCE SHEET No. 1

<i>Capital and Liabilities</i>	<i>£</i>	<i>Assets</i>	<i>£</i>
Capital (subscribed by proprietors, e.g. for shares)	5,000	Fixed Assets at cost (tangible and intangible creations)	6,000
Loans on defined terms (e.g. for debentures, etc.)	3,000	Cash (part of capital and loans not yet employed)	2,000
	<u>£8,000</u>		<u>£8,000</u>

The amount of cash (£2,000) above is available as "circulating capital," i.e. it may be turned over by application to the purchase (or production) of commodities (or services) for sale, or, partly, as expenses of operation and management. Such applications of

wealth then lead by sale to conversion of the product into money or debts collectible, and debts collectible are later converted into money. The original cash has thus passed through a cycle and returned (in varied quantity) to money forms, such as cash or bank balances or otherwise. Successive cycles follow the same routine.

The cycles of operation are, of course, continuous and overlapping in point of time, so that at any given moment some cycles will be completed and be represented by unsold or unfinished goods, unappropriated expenses, uncollected debts, bills awaiting maturity, and so on. Such intermediate facts are expressed as assets in a balance sheet, and are therefore termed circulating assets, i.e. assets in cyclic liquidation or conversion.

The financial volume of assets in circulation may be of greater measure than the amount of circulating capital, inasmuch as goods and services may be obtained on credit, i.e. subject to a "time lag" before one asset (say, cash) is actually passed over in exchange for another asset (say, goods) or service. Such a lag will be present normally, so that there will be a normal measure or margin of credit standing with the circulating capital to finance the cycles of conversion.

The object of circulation is to run the successive exchanges of wealth forms, so that the ultimate cash conversions may exceed the original cash applications. The amount of this excess created is the primary measure of profit.

3. Profits Related to Circulating Capital. Let us refer to Balance Sheet No. 1 of this chapter and suppose that since its date the following transactions have occurred.

(a) Goods value £2,000 purchased, and £1,000 paid on account of such purchases.

(b) Goods value £1,500 sold, and £800 received on account of such sales.

(c) Expenses paid amounting to £200.

(d) Stock left over unsold but valued at £1,000.

Ignoring all questions of depreciation, capital conditions, future risks, and details of valuation, the balance sheet (with workings added) will read as follows—

BALANCE SHEET No. 2

	Trans- action	£		Trans- action	£
Capital (as before) . . .		5,000	Fixed Assets (as before) .		6,000
Loans (as before) . . .		3,000	Stock . . . (d)		1,000
Creditors, £2,000 less £1,000 paid (a)		1,000	Debtors, £1,500 less £800 received (b)		700
Profits—			Cash, original £2,000		
Sales . . . £1,500 (b)			„ receipts 800 (b)		
Stock . . . 1,000 (d)					
		2,500	„ payments 2,800 (a) and (c)		
Purchases . . . £2,000 (a)			„ Balance 1,200		1,600
Expenses . . . 200 (c)					
		2,200			
Profits		300			
		<u>£9,300</u>			<u>£9,300</u>

We see repeated in the above balance sheet only some of the items in Balance Sheet No. 1, viz. the *fixed* assets and *fixed* liabilities. The other items are all measures of transition facts of cycles interrupted for the purpose of this account.

Let us take the facts further, and, ignoring the intervention of new cycles and the incidents of realization, let us suppose the above cycles to run to a cash finality. To clear the illustration we must suppose therefore—

(i) Stock converted to cash (without loss or profit)	£ 1,000
(ii) Debts collected in cash	700
	<u>1,700</u>
(iii) Creditors paid in cash	1,000
	<u>£700</u>
(iv) Net addition to cash	

The balance sheet will now read—

BALANCE SHEET No. 3

Capital (as before) . . .	£ 5,000	Fixed Assets (as before)	£ 6,000
Loans (as before) . . .	3,000	Cash (as Balance	
Profits	300	Sheet No 2) . . .	£1,600
		Cash (Addition). . .	700
			2,300
	<u>£8,300</u>		<u>£8,300</u>

In Balance Sheet No. 2 we note a profit of £300 subject to the facts of realization, and in Balance Sheet No. 3 we note its realization. We now compare Balance Sheet No. 3 with Balance Sheet No. 1, and note the following differences as the results of a period of trade and of its realization—

(a) Cash has increased from £2,000 to £2,300, i.e., by £300.

(b) An item "Profit £300" has appeared on the other side of Balance Sheet Nos. 2 and 3.

From this comparison we note that the business might embark on further cycles of trade with a circulating capital increased by £300, i.e. the amount of profit recorded.

Profit, therefore, is primarily the measure of increase in the volume of circulating capital, though such profit is subject (*inter alia*) to realization and the risks attendant on realization. *Per contra*, we might have proved that a loss is reflected in the reduction of circulating capital, as the balance of the profit and loss account would be recorded on the opposite side of the balance sheet (in Balance Sheets Nos. 2 and 3), and cash would be reduced finally by the amount of such loss.

Proceeding with this fundamental notion of profit,

we must advert to the consideration of further incidents attaching to its nature and measure. Ordinarily speaking, the profits of a business are viewed as the fund measuring the proprietors' demand for dividends, drawings, etc. (Note profit is an accounting liability accordingly.) The possibility of discharging such demand is, however, conditional upon further considerations being satisfied. These are now set forth in a summary pending further detailed treatment—

(a) The profits must be represented by "*circulating assets*" capable of liquidation without loss within a period of ordinary settlement.

(b) The efficiency of the fixed assets must remain unchanged from their original standard.

(c) The "Loan Capital" must continue to be available.

(d) Future risks and contingencies must be provided against, whilst notions of equalization of distribution may operate.

(e) The amount of circulating capital which served the first period must be capable of serving the volume and course of transactions in the succeeding period.

(f) Some elements of the profits of their nature may not be considered as properly or legally distributable as the produce of a period.

In practice, all the above considerations lead to modifications of the estimate of the proportion of profit which is distributable, so that, even where profit has been calculated in the manner already described, the final computation of "profit available for dividend" may be distinctly different from the profit in the primary or direct calculation. The fact that "profit made" and "profit available" may connote different quantities tends to force adjustments into the profit and loss account and, by double entry, into the balance

sheet. These adjustments are not confined to *current* facts of profit and loss, so that profits and losses may be "adjusted" to express a final resultant figure which may be "safely" considered as available for distribution.

The measure of these adjustments may be specifically and openly related to incidents expected (or feared) and form the measure of a frank and open reserve, or they may be hidden or made secret by the use of biased notions of valuation or computation. Canons of prudence and variations of forecast have their effect on these adjustments. We shall later trace the manner and effect of such adjustments, even though we may not try to measure their proper limits otherwise than by a test of honest intention.

4. **Fixed and Circulating Items in Balance Sheets.** We have seen that the convertible items in a balance sheet are interim products pending ultimate realization. The other items are termed "Fixed," i.e. they are not subject to cyclic conversion and replacement but to retention until substitution is enforced.

Fixed assets are therefore those intended to be held for their period of utility as the tools, containers, or continuing potentialities of a business. They may wear out, decay, become obsolete, lapse with effluxion of time, but, whether tangible or intangible, they are the instruments of operation distinguished from the materials or the feed of operations.

Circulating assets is the term applied to the products of the operations of the business in its ever recurring cyclic operations. They are converted to other forms of wealth through a series of transitions until they reach their final realization in money form.

The primary nature of an asset alone does not classify it, but its intended purpose does. A ship is

a fixed asset to a shipping company, but a circulating asset to a ship builder. A horse is a fixed asset to a master carter, a funeral furnisher, or a racehorse owner, but a circulating asset to a horse dealer.

This simple distinction, we shall see, governs the principles of valuation, and thus the measure of profit, so that the differentiation between the two classes is of primary concern.

Similarly, liabilities are either "Fixed" or "Circulating," and the distinction is based on the following notions.

Fixed liabilities are liabilities created to finance fixed assets or augment the contributed circulating capital. They are usually subject to fixed or determinable terms of ultimate repayment, and (as a class) usually involve a long term factor. There may be replacement of an individual liability by process of substitution (e.g. mortgages of a local authority), so that the *class* idea is essential to this consideration.

Circulating liabilities, however, represent the results of passing credit, the products of current accounts, the obligations offsetting the successive acquisitions of convertible goods and services.

Capital may be considered a fixed liability in a general consideration.

These definitions are subject to marginal complexities in practice, but, pending further remarks, will serve the present purpose, which is to consider the incidents attaching to circulating capital and their effect upon profit statements.

5. The Two Account Analysis of a Balance Sheet. A balance sheet may, for analysis, be divided into two statements—

(a) The capital and fixed assets section—the upper section in the statement hereunder.

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(b) The circulating assets and liability section—the lower section, and this method of separation is essential to the consideration of the subject-matter of this book.

The upper part is balanced to show the balance of capital receipts not expended on fixed assets, and a similar, but oppositely stated, balance is entered in the lower section. For example, Balance Sheet No. 2 (*ante*) is written below in two sections (cp. the double account system relating to railways and other public undertakings, and note in passing Sec. 124 (1) of the Companies Act, 1929).

BALANCE SHEET No. 4

(Being No. 2 Restated)

(a) FIXED CAPITAL SECTION

Capital	£ 5,000	Fixed Assets	£ 6,000
Loans	3,000	Balance (being circulating capital provided)	
		carried down	2,000
	<u>£8,000</u>		<u>£8,000</u>

(b) CIRCULATING CAPITAL SECTION

Contributed Circulating Capital as per part (a) brought down	£ 2,000	Stock	£ 1,000
Creditors	1,000	Debtors	700
Profit	300	Cash	1,600
	<u>£3,300</u>		<u>£3,300</u>

The example is of the simplest order, and more complex circumstances will arise requiring the following variations or extensions of treatment—

(a) Bank overdrafts are—

- (i) Circulating liabilities if casually occurring.
- (ii) Fixed liabilities if a regular feature of the business finance.

Preferably the permit limit of overdraft should be entered as a capital liability, and the unborrowed part as a circulating resource, described as "bank balance available." (This treatment applies only to this method of analysis and not to general balance sheet forms.)

(b) Investments will be entered in the upper part as capital assets if they are held primarily for dividend earning purpose, or, if held against specific accumulations, described as reserve or depreciation or other funds. Where investments are considered as money unemployed but temporarily invested, they will be entered in the circulating capital section and interpreted as money "available for circulation."

(c) Where cash (or bank) balances include a part due for investment, that part should be separated and entered in the part in which its investment would be recorded.

(d) Fixed assets should be recorded at cost, and any depreciation deductions (or offset) should be recorded on the liabilities side. If such deductions, called funds, be invested externally, the funds and their related investments may be excluded from the circulating capital section and entered in the fixed capital section. Where no investment against such funds exists or is contemplated, the funds will be entered in the circulating capital section, as it will then be clear that such funds have been "invested in the business," i.e. normally in circulating operations.

6. **Circulating Capital a Cardinal Factor in Accounting Interpretation.** The whole purpose of dividing the balance sheet into two parts is to ascertain the funds utilized in financing circulation. We shall find that

the "profits" of a business are affected, not only by the incidents of fact and valuation attaching to the floating balances, but also by the facts which bear on the measure and potentiality of the circulating capital provided, including therein the funds for depreciation of fixed assets or repayment of loans and other matters.

Particularly we shall note that factors of time and valuation meet in the lower section, so that time factors affect valuation notions. Problems of periodicity, of turnover volumes, of demands certain, contingent, or determinable must be taken into account in the full interpretation of this section of the balance sheet, or may have been "discounted" in its primary statement. In the upper section, time factors are of the long term variety, but affect the whole matter ultimately with gradual or accruing demands meanwhile.

The lower part of the balance sheet indeed gives a view of the business in action, subject to the interaction of its elements and the over-riding demands related to the upper section. Such facts may be separately examined but they interact as a moving whole, and the resultant of such actions bears on the final issue, viz. the calculation of profit. Our examination of the parts will be piecemeal, but the total or resultant view will emerge finally (Chapter VIII).

CHAPTER II

FINANCING STOCKS, PROCESSES AND CREDITS

ARGUMENT. *The adequacy of the circulating capital to finance further processes is a condition precedent to the distribution of calculated profit.*

I. **Circulating Balances Reflect Trade Policy.** The function of circulating capital is to be "turned over," and, as each cycle of turnover is designed to produce a profit, the repetitions of turnover are essentials of trading policy. Each business must budget its trade policy on the basis of the credit it may give, the limit of stock it may carry, or the limit of time during which certain volumes of stock may be carried, whilst guarding against taking more than a permissible credit period in paying for its own supplies and services. The operation of these conditions is reflected in the circulating capital section of the balance sheet. Credit given is reflected under sundry debtors and bills receivable, whilst credit taken is reflected under sundry creditors and bills payable. Stock on hand, work in progress, and expenses in advance reflect proportionate facts of the business operations.

Thus, where three months' credit is the normal given to debtors, the volume of debts collectible at any point will tend to equal the total of credit sales during the preceding three months. Similarly, when two months' credit is received, the trade liabilities will tend to equal the last two months' purchases. If stock on hand is supposed at any point to be a month's supply, its value in the balance sheet will tend to some agreement with the cost of the expected volume of the following month's sales. Then, purchases and sales

tend towards normal relation between themselves, so that finally there is some correlation of the volumes of sales, purchases, debtors, creditors, and stocks. Circulating capital and credit received are mainly concerned in financing debtors, stocks and expenses through the sales volume, and the volume of circulating capital so tends to some correlation with all these factors.

Thus a critical examination of a detailed balance sheet may result in detection of—

(a) Undue credit taken by debtors, or faults in the collection machinery.

(b) Undue credit taken at the expense of creditors through negligence or over-trading.

(c) Undue or unprofitable carrying of stocks.

(d) Inadequacy of circulating capital to finance normal trade, or excess of circulating capital available, leaving cash or bank balances as a part of capital held in relatively unprofitable forms.

It must be noted here that we are considering balance sheets which may be prepared for inside or managerial information mainly, and a balance sheet for publication may not lead to full detailed analysis, and in any case may be affected by internal adjustments yet to be considered, or by “window dressing” (i.e. special conditions secured by special action at the close of a financial period).

2. Circulating Capital and Credit. If the business conditions involve that three months' credit shall be given to debtors, this fact alone involves that value is locked up by each sale for three months, so that even supposing, for the sake of simplicity, that monthly volumes of sales are normally equal, the finance required (i.e. credit received and circulating capital combined) is required to equal at least three months' sales volume, or one fourth of the annual turnover. On the other

hand, if only one month's credit be given under similar conditions, the finance required is only equal to one month's turnover, or one twelfth of a year's sales. If the business is a cash sale business, no finance is necessary to cover its sales (beyond that necessary to cover the stock carried).

In the provision of such finance there is the relief of credit received. If a business receives two months' credit, such credit will reduce the quantity of circulating capital required by the volume of two months' purchases, or, say, one-sixth of the year's purchases. As purchases will tend to be in constant ratio to sales, the measure of this relief may be expressed as a fraction of turnover. If no credit be received there is, of course, no such relief, but, *per contra*, it is possible to receive a normal term of credit exceeding the term of credit given on sales, so that a point may be reached when purchase credit will finance, or even exceed, sales credit.

Stocks must be carried in measure which will be determined by—

- (a) The variety of types desired,
 - (b) The periods necessary for replacement after sale,
 - (c) The averaging policy of the producing section designed to maintain cost levels,
 - (d) Reserve margins to ensure continuity of sales policy, and
 - (e) In respect of some lines, the desire to force a market by display,
- whilst special conditions of favourable purchase terms, seasonal demands, and so on, will produce some elements of fluctuation.

The volume of stock is an investment of finance which will demand cover by capital and/or credit. Conditions tend to average so that it is possible to

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state the demand for finance in terms of a purchase ratio, and then in terms of a ratio to sales or turnover. The characteristic of a business in relation to stock may thus be stated as involving a measure of circulating capital equal to a fractional multiple of its turnover, and tests of the actual ratio may locate the existence of slow stocks, of bad stock policy, or of other factors bearing against profitable user.

Thus pursuing arguments based on averages or normality, we may tabulate figures relating purchasing and selling conditions to circulating capital.

Supposing a business with a turnover of £120,000 per annum earning a gross profit of $33\frac{1}{3}$ per cent on sales, we might calculate the principal demand for working capital by reference to the following table of figures—

Calculations					Resultant Figures in Selected Examples	
	1 mth.	2 mths.	3 mths.	4 mths.		
Expected Debtors	£10,000	£20,000	£30,000	£40,000	3 mths. £30,000	2 mths. £20,000
Expected Stocks (66⅔% of sales value)	6,667	13,333	20,000	26,667	2 mths. 13,333	1 mth. 6,667
					£43,333	£26,667
Expected Creditors (66⅔% of sales value)	6,667	13,333	20,000	26,667	1 mth. 6,667	3 mths. 20,000
Measure of circulating capital demanded by standard trade volume					£36,666	£6,667

Summarizing the conclusions from the above we find—

(a) That circulating capital is demanded in greater measure by—

- (i) Granting longer credit terms to debtors; or
- (ii) Carrying greater stocks; or
- (iii) Taking shorter credit from creditors.

(b) That circulating capital is required in smaller volume where—

- (i) Shorter credit terms are given to debtors; or
- (ii) Smaller stocks are carried; or
- (iii) Longer credit is received from creditors.

3. **Multiplying Circulation.** Each cycle of circulation brings its profit, so that if the operating profit on £100 of sales be £10, we find that with twelve £100 cycles in a year £120 profit is produced, but with four such sales in a year the profit is £40 only. Thus the profitable use of capital depends upon multiplying circulation. If, therefore, we find that debtors accustomed to take three months' credit can be induced by a discount of 5 per cent to reduce their credit to one month, we shall find that such a policy may pay as follows—

(a) £100 cycles at three months earn £10 four times in a year, i.e. £40.

(b) £100 cycles at one month's credit subject to 5 per cent discount earn £5 twelve times in a year, i.e. £60.

It must be noted that in example (a) we require customers to buy £400 worth of goods, and in example (b) £1,200 worth, so that these examples register extreme conditions of change. Otherwise expressed, however, if one firm is able to carry out the conditions of (b) whilst another may only succeed in carrying out the terms of (a), they will (as regards sales volume taken alone) have an identical demand for circulating capital.

Converse conditions might be described in relation to purchases, but we shall express the final conclusion, viz., that (a) to earn cash or term discounts requires more capital than to take advantage of credit conditions on net terms, and that (b) discounts given to

debtors for quick settlements tend to reduce capital necessities.

4. **Slow Debts and Bad Debts Reserves.** It has been made clear that normal credit given to debtors involves capital, subject to the set-off of other factors. Where debtors take credit longer than normal, further capital necessities will arise. All experience shows that some debtors will tend to exceed normal credit terms.

Apart altogether from the fact that debts may prove to be bad ultimately, it will now be clear that debts which are slow, even though considered realizable, will interrupt the circulation of the capital involved. This delay in circulation may tend to restrict purchasing power, may cause loss of discount for prompt payments, or, in extreme cases, contraction of trade volume. Periodicity of turnover is a profit factor, so that there is the promise of loss when periodicity is interrupted.

Prudence demands, therefore, that when debtors' balances are out of proper proportion steps should be taken to replace the lost circulation power. We have seen in Chapter I that profit is available primarily as additional circulating capital, if required, and it will now be clear that if the circulating power of the capital provided promises to be reduced by extension of credit to debtors, the cash liquidation of the profit will be delayed in circulation, i.e. the measure of total circulating capital *employed* will be increased by the measure of outstanding profit attached to the items responsible for the lag in circulation power.

Bad debts reserves are therefore provided, not merely for the purpose of earmarking out of profits the measure of the expected bad debts, but also to prevent the distribution of profits which are required to repair the damage to circulation power.

Accountants tend to reserve a sum annually, which

is not therefore merely measured by an estimate of bad debts to be experienced, but which is quite commonly in the form of a percentage on the aggregate debtors' balances. It is frequently suggested that such reserve is primarily calculated on the basis of past experience with the suggestion that, say, 5 per cent of a volume of debts may be expected to be bad. It will, however, be found that the common practice is based upon no such measure of experience, but on an empirical rule of prudence which tends to habit rather than to a reasoned course of action. The notes in this paragraph will now tend to justify the accountant's practice, though not necessarily justifying in any one case the actual percentage charged. Indeed, it is not intended to suggest any positive rule or measure which should be applied, but merely to note that a demand is made in every case by its own facts, and that a somewhat common practice exists which meets this demand in some measure.

It must be repeated also that the isolation of a single tendency, even where it is capable of measure, cannot demand a measured treatment without consideration of other offsetting factors, which bear on the whole whilst not relating directly to the part; so that the existence of other factors tending to maintain circulating capital cannot be overlooked when we find a specific, but relatively small, *contra* demand arising in a particular way.

• We have, however, noted a condition which tends to separate the term "profit" from "available profit" in some degree.

The special pre-determined conditions relating to hire sales contracts are dealt with in Chapter III.

5. Increasing Trade Values and Circulating Capital. A difficulty of distribution of profit arises when the

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financial trade volume increases, as such increases of trade tend to demand a greater measure of circulating capital. The source most readily available for the increase of working, i.e. circulating, capital is the profit in hand, so that direct and indirect methods of retaining profits from distribution tend to follow when trade volumes tend to increase. We shall first examine the effect of such increases on the circulating capital to measure the reality of this demand. We shall suppose the figures of two consecutive periods to be as follows, the characteristic changes being noted—

	Period 1	Period 2	Changes Noted
Purchases . . .	10,000	20,000	Volume doubled to cover increase of sales and of stock.
Creditors at end .	1,800	3,300	Credit contracted from 18% to 16½% of purchases.
Sales	15,000	28,000	Growth of trade (financial) volume.
Debtors at end . .	5,000	10,000	Credit allowed increased from 33½% to (say) 36% of sales.
Stock at end . . .	3,000	5,000	Increased stock, but ratio to sales reduced.
Expenses paid . .	3,000	5,000	Increased, but ratio to sales reduced.
Cash at end . . .	500	—	

The profit and loss account for Period 2 is constructed below—

PROFIT AND LOSS ACCOUNT

Dr.	PERIOD 2		Cr.
To Opening Stock . .	£ 3,000	By Sales	£ 28,000
„ Purchases	20,000	„ Closing Stock . . .	5,000
„ Expenses	5,000		
„ Profit	5,000		
	<u>£33,000</u>		<u>£33,000</u>

The cash account is reconstructed as follows—

Dr.		CASH ACCOUNT	Cr.	
To Opening Balance	£ 500	By Payments to Creditors, viz.—		£
„ Receipts from Debtors, viz.—		Purchases	£20,000	
Sales	£28,000	Unpaid	3,300	
Less Debtors	10,000		16,700	
	18,000	Add Opening Creditors	1,800	18,500
Add Opening Debtors	5,000	„ Expenses		5,000
	23,000			
	£ 23,500			£ 23,500

We now set out the circulating capital section of the two successive balance sheets—

BALANCE SHEET No. 5
(CIRCULATING CAPITAL SECTION ONLY)

	Period 1	Period 2		Period 1	Period 2
Creditors	£ 1,800	£ 3,300	Stock Debtors	£ 3,000	£ 5,000
Circulating Capital available at end of first period	6,700	6,700	Assets in circulation	8,000	15,000
Profit of second period		5,000	Cash	500	nil
	£8,500	£15,000		£8,500	£15,000

We note that the increase in circulating non-liquid asset balances (£7,000) has been relieved by increased credit only to the extent of £1,500, so that the additional finance of £5,500 has been provided by utilizing (a) the unemployed cash at the end of the first period; and (b) the profit made during the second period. Thus

we have closed a period of increased trade at a profit, but in order to distribute such profit immediately we should have to borrow from the bank or introduce some form of liquid capital. The position is relieved, of course, if the second period's trade is known to be the product of exceptional conditions so that temporary borrowing or mere postponement of dividends will provide quite a satisfactory solution. If, on the contrary, the increase in trade volume is expected to continue, it is clear that the profit made is not distributable, and shareholders would be required to be informed that, notwithstanding an increase of prosperity, it has become necessary to pass their dividend.

Contemplating the explanation to be made to shareholders, it is at least understandable that principles of valuation will probably be revised, contingent circumstances reviewed, and other "adjustments" of account" considered with a view to presenting a different and lower statement of profit in the account. This certainly is a frequent practice in such cases, though it must be admitted that the ratio of increase of trade in the illustration is more extravagant than in the probable case of any actual business.

The manner of the adjustments which might be applied is still subject to further considerations, and the present purpose is to find the motive and obtain some view of its measure.

"Increased trade volume" above may be applied also to mere inflation of values of the same physical volume, thus explaining some phenomena of post-war circumstances. Converse considerations and conclusions will not be overlooked by the careful reader.

6. **Suspense Expense in Balance Sheets.** Items of expense find their way into balance sheets impressed with the intention of distributing their cost over a

short period of years. These items may, of their nature, be capital expenses, but not intended to be treated permanently as such, or they may be of a semi-revenue character, but may involve incidents which render undesirable their charge against the profits of a single period. Examples are: alteration to plant or fixtures, triennial repainting, re-organization expenses, etc. In each case there is generally some measure of future advantages or immunity to be reaped, and thus, in measure, they are of asset character to a continuing business.

This type of item, however, represents a "freezing" of circulating capital, unless reserves have been previously created to provide an offset. Considered conversely, the creation of such reserves in advance is justified, in theory, by the approaching interference with circulation of capital when the forecasted conditions arise.

To complete the illustration we add the circulating section of a balance sheet containing such an item—

BALANCE SHEET No. 6

	£		£
Circulating Capital provided	2,000	Stock	1,000
Creditors (trade only)	1,300	Debtors	1,200
Profit	£1,200	Suspense Ex-	
Less $\frac{1}{3}\%$ of sus-		penses	£1,500
pense expenses	500	Less written off	500
	700		1,000
		Cash	800
	£4,000		
			£4,000

We note that had the above expenditure not been incurred and paid for, the cash balance would be £1,500 plus £800 = £2,300, and the profit £1,200, thus (apparently) allowing a full distribution. The expenses

having been incurred and paid for, if none of the expense had been written off the profit of £1,200 could not be fully distributed, but it is possible to distribute the profit reduced by one-third of the expenses. In practice, however, these facts would not stand alone, and again we note only a point contributing to a final complex view of the availability of profits for distribution purposes.

7. *Operating Costs Treated as Assets.* Expenses of a recurring character such as rates, insurances and other periodic burdens are apportioned over successive profit and loss accounts on a time basis, so that although "payments in advance" represent revenue charges, i.e. value consumed, they are considered as the measure of the advantages or immunities still to be enjoyed, or, may be, as the costs of later operation to be recouped out of its produce. It is therefore not improper to consider such costs as assets in measure of the amount proportionate to the measure of unexpired time or other term of user.

Again, expense sunk into incomplete processes forms part of the cost, and thus *prima facie* part of the value, of the processes themselves. As such processes will be completed and converted in the later periods of account, here again the costs to date will be properly described as assets, subject to some canons of valuation.

Such suspense costs are, however, a normally recurring feature of all businesses, and differ from stock only in that they have a restriction on their realization, i.e. they are generally realizable with the stock itself in the ordinary way of business. The financial volume of such items will, therefore, be covered by the circulating working capital provided to carry on the cycles of which they form part.

Conversely, however, the restricted realizability of

these items brings to bear upon the accounts prudential views of valuation, and such assets may be expressed in low terms of value or not included as possessing any value whatever, just as the view adopted dictates. Regularly recurring items will, no doubt, be treated uniformly from period to period, but where adjustments of profit are dictated by conditions generally the items not regularly recurring *in the same measure* will provide a ready opportunity to adjust profits.

CHAPTER III

HIRE-SALES PROFITS

ARGUMENT. *Deferred payments enforce a correlative deferment of transferring book profit to dividends account.*

I. **The Hire-sales Contract.** The legal aspect of a hire-sales contract involves that all payments except the last one are considered as payments for hire, whilst the last one conveys the right of ownership. This legal fiction, however, does not bear on accounting treatment, except when consequences of forfeiture arise. The material fact is that the money return of deposits plus instalments gives the trader a total return of which the elements are—

- (a) Cost of goods to the trader.
- (b) A trade profit on the sale.
- (c) A “finance charge” for the deferment of receipts, and (sometimes)
- (d) A “loading” to cover guarantee maintenance meanwhile.

Logical arguments might be developed demanding that separate incidents attach to these elements involving apportionment over successive years' accounts, but it is intended in this chapter to show that the practical adjustments are dictated by circulating capital conditions which transcend any demands of logical argument.

The outstanding feature of trading of this nature is that there is a measured deferment of credit, and we have already seen that credit given so affects the power of the circulating capital as to bring profit under review for its adjustment or partial reserve.

Hire-sales indeed form an extreme and positive

example of deferred credit, and the accounting treatment of such trading affords a specialized method, which is a general background for the consideration of cognate principles in cases where the application is not so regularly marked nor so easily subject to forecast.

2. Circulating Capital and Hire Trading. To illustrate the trend of accounts in this connection we must first exemplify the result of a regular or standard series, and leave for comment the effect of irregularity or progression of volume.

We shall therefore consider a series of transactions for seven financial years, excluding all matters of account not bearing directly on the course of the hire-sales transactions.

The normal central fact of the series selected is that the trader buys a standard annual quantity (£360) of goods and opens in each of the first five years new sales contracts of exactly the same volume and detail. As the series commences at zero and finishes likewise, the first two years and the last two years are not normal, but are transition years to and from normality.

The minimum (and here the actual) finance employed is clearly the measure of a year's purchases (£360), and credit (£120) being the same in each year (and stock being omitted to simplify the example), we have a uniform capital factor of £240 as the basis of all considerations.

The particulars selected are given in the table on page 28.

The trading accounts, cash accounts, debtors' accounts, and creditors' accounts for each year may easily be prepared from the figures given, and the balance sheets for the seven years are then as set out on page 28; the upper part representing the assets side, the lower the liabilities side.

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	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Purchase Costs	£ 360	£ 360	£ 360	£ 360	£ 360	£ nil	£ nil
Full Hire-sale Charges	600	600	600	600	600	nil	nil
Cash from Debtors (contracts 3 years each)	200	400	600	600	600	400	200
Cash paid Creditors	240	360	360	360	360	120	nil
Outstanding Liabilities	120	120	120	120	120	nil	nil
Original Capital equals cash provided to cover—							
Goods for year	£ 360						
Less Credit	120						
	240						

BALANCE SHEET No. 7

(YEARS 1 TO 7)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<i>Assets</i>							
Outstanding Instalments	£ 400	£ 600	£ 600	£ 600	£ 600	£ 200	£ —
Cash accumulated	200	240	480	720	960	1,240	1,440
	£ 600	840	1,080	1,320	1,560	1,440	1,440
<i>Liabilities</i>							
Creditors	120	120	120	120	120	—	—
Standing Capital	240	240	240	240	240	240	240
Profit accumulated, but full profit credited to each year (£240 per annum)	240	480	720	960	1,200	1,200	1,200
	£ 600	840	1,080	1,320	1,560	1,440	1,440

3. The Book Profit and the Cash Position. In the above example we find—

In Year 1. The “profit” exceeds the cash by £40. (This year had no balance to finance from a previous year, so that this figure of £40 carries a significance which is real, but not proportionate.)

In Year 2. The “profit” for two years exceeds the cash balance by £240. (Normality not being definitely established at the end of this year, we defer comment pending the examination of the later years.)

In Years 3-5. Normal working of a standard volume of three year contracts now show full operation. The

cash accumulated at the end of each year is exactly £240 less than the profit accumulated. £600 debtors are offset only by £120 credit, leaving £480 to be financed by £240 of foundation capital, so that the series requires £240 further capital to finance it.

It is concluded from the above that a compulsory reserve of £240 is required to be retained from profits so long as the conditions remain according to standard. In the sixth year the normal condition has lapsed, and no reserve is due whilst £40 capital has been released. In the seventh year the profit and the capital are entirely free.

Examination of these compulsory reserves reveals that they are just equal to "the ratio of profit included in the outstanding instalments," or rather that the reserve bears a ratio to the outstanding instalments equal to the ratio of profit on the full hire-sales, here 40 per cent.

It will be noted that the disintegration of the "profit margin" does not affect the matter at all. The total reserve is forced by a total ratio, and to split the reserve into true profit, interest, and maintenance contributions will still leave a standard total of reserved profit, no matter how its elements be analysed.

It will be noted further that the free profit is £240 in each year, i.e. the measure of the ratio of profit to sales multiplied by the actual hire receipts.

We thus deduce the general result, viz. that the free profit on hire-sales trading is the measure of profits attaching to the *actual receipts* of the year, whilst the profit to be reserved is the measure of profit attaching to the *instalments still outstanding*. This rule is not dictated by consideration of risks or of proper allocation of the profit, but by capital conditions. Risks and other considerations will alter the full demand for reserve (see Sec. 4).

4. **Variations from the Normal.** Consideration of the earlier matter in this chapter must be strengthened by a clear understanding that the precise results ascertained will not be so clearly traced under mixed or progressive conditions of time, ratios of profit, periods of contracts, volumes of stock carried, volumes of trade, or spread of instalments.

We have selected rigid conditions to find the trend, and now cite the effect of the conditions which in practice will obscure the definiteness of such trend. The rule cited at the end of the preceding section will in no wise be affected, except that some of the conditions will in fact render the "free profit" subject to further adjustments in the general result, but not by any rule for "adjusting" the hire profit itself.

Factors obscuring normal trends will be found by consideration of the following—

(a) Capital will also be required to carry additional stocks, subject to an allowance for any increase in the margin of credit received. If capital be not available to do so, the circulating capital will require to be strengthened by general or other reserves.

(b) Alteration of the credit received will alter the capital necessity, increased credit releasing capital, and reduced credit demanding more capital. This also is a problem for general reserve considerations.

(c) Alteration of volume will affect the capital similarly, increases demanding more capital and reductions liberating capital.

(d) Time factors in the contracts may spread the cash receipts unevenly, and an irregular series will require capital (or recourse to borrowings) measured to finance its peak or maximum demand, with relief to capital corresponding with the lower part of the graph of outstanding accounts.

5. The Methods of Creating Hire-sales Reserves. This book is not intended to be descriptive of accounting method, but of the accounting principles which govern method, as it is thought that variation of method is of less importance than variation in the presentation of results. The following notes are, however, given to reconcile the principles stated with other texts on method, and are necessarily restricted to show the final records.

(a) THE APPORTIONED RESERVE METHOD. By this method the hire debtors' accounts are entered "gross," but the profit is apportioned in the original calculation to its appropriate years. The suspended profits are dated forward and are intended to be deducted meanwhile from hire debtors in the balance sheet to reduce their value to a "proportion of cost." (This basis of valuation should be contrasted with that on page 18, referring to ordinary sale debtors.) Taking the same particulars as in Sec. 2 of this chapter, we apportion as follows—

Sales in	Total Profit	Cumulative Profits	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Year 1 . . .	£ 240	£ 240	£ 80	£ 80	£ 80	£ —	£ —	£ —	£ —
Year 2 . . .	240	480	—	80	80	80	—	—	—
Year 3 . . .	240	720	—	—	80	80	80	—	—
Year 4 . . .	240	960	—	—	—	80	80	80	—
Year 5 . . .	240	1,200	—	—	—	—	80	80	80
Profits taken .	£ 1,200	1,200	80	160	240	240	240	160	80
Forward Reserves . . .			£160	240	240	240	240	80	—
Debtors in Balance Sheet . . .			400	600	600	600	600	200	—
Less Profit Reserve above . . .			160	240	240	240	240	80	—
Net Value of Debtors in Balance Sheet = 60% of gross value, i.e. cost proportion . . .			£240	360	360	360	360	120	—

(b) THE ANNUAL RESERVE METHOD. In this method the original debts are also made "gross" and an annual

reserve is made for the forward profit. It is, therefore, not different in the result from the above, but, in practical cases, the real reserve will not be exactly ascertained, and a substitute percentage (or a series of percentages) will be used instead of calculating the precise reserve on each contract. The regular percentage of profit used in this example will not therefore bring out the differences.

The reserve made is carried down in the hire profit accounts as a credit balance for set-off in the balance sheet against the debtors' balances. The balance sheet figures are as follows—

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Hire Debtors	£ 400	£ 600	£ 600	£ 600	£ 600	£ 200	£ —
Less Reserve 40%	160	240	240	240	240	80	—
Net Value of Debtors in Balance Sheet	£240	360	360	360	360	120	—

The result agrees with that under (a), though in practice the "short cut" method of valuation will cause minor differences from year to year.

(c) THE PROPORTION OF COST METHOD. Under this method the cost of the stock issued is charged to a hire trading account and the actual receipts are credited against this account. At each balancing date "the proportion of cost in outstanding balances" is carried forward as "proportion of cost of stock on hire."

The actual result of the method is similar to—

That under (a) where each item of stock is separately calculated by discounting the outstanding instalments by the proportion of profit attached to it; and

That under (b) where the stock is calculated by discounting the outstanding stock by general percentages estimated to cover the proportion of profit.

The hire trade account may be outlined as follows—

HIRE TRADING ACCOUNT

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<i>Credit Side—</i>							
By Cash Instalment Deposits	£ 200	£ 400	£ 600	£ 600	£ 600	£ 400	£ 200
„ Proportion of Cost forward (60% of outstanding instal- ments)	240	360	360	360	360	120	—
	£440	760	960	960	960	520	200
<i>Debit Side—</i>							
To Proportion of Cost forward from previous year	—	240	360	360	360	360	120
„ Cost of Stock issued	360	360	360	360	360	—	—
„ Profit, i.e. Balance	80	160	240	240	240	160	80
(Note: = 40% of Receipts)	£440	760	960	960	960	520	200

6. **Balance Sheet Values.** The treatment described indicates that *cost* is the basis for balance sheet valuation of this type of transaction, and it is urged that this is forced by consideration of capital conditions. We contrast the position of debts in course of ordinary credit, the face value of which is the *basis* of value. The opposition of the two principles, which are at extremes, is indicative of the field of adjustment which is available to present varying computations of profit.

It is urged, sometimes, that the basic reason for this cost proportion valuation is the nature of the contract. It is pressed in this argument that a debt is a claim against a person, and an outstanding hire trading instalment is a measure of right against goods, so that notions attaching to stock valuations apply to the latter. Whilst undoubtedly this argument supports the method and may be conclusive, it is urged that it is not the primary consideration. The method applies even to those cases where there is retained a power to sue for losses.

Accounting valuations are not normally based upon possible incidents which are unlikely to occur beyond a certain measure, so that the possibility of exercising a particular legal remedy in *some cases* would not be strong enough to enforce a valuation basis for *all*. We urge that, even where the sales are outright in point of the title to goods, but deferred credit is allowed by way of instalment payments, the methods of reserve described are equally enforced by good principles. The financial effect (apart from forfeitures) is *identical* with that of hire trading. Facts govern accounting results, not legal fictions.

Forfeited stock resumed involves a point of valuation. These items are valued at the "cost back," i.e. the proportion of cost outstanding when seized, plus any expenses which since have attached to them. There is, of course, a further potential value attaching to some of such goods, as their "replacement" value may be higher than the outstanding proportion of cost. Exact principle does not allow "marking up" these goods, though the relatively small proportion of such stock on hand at any time tends to limit the importance of precise accounting treatment. Frequently in the case of businesses manufacturing their own goods a stock price will be attached to forfeited goods when renovated, so that other conveniences arising from this method will be considered as outweighing the "cost back rule."

CHAPTER IV

REPLACEMENT OF CAPITAL ASSETS

ARGUMENT. *Depreciation reserves have the nature of profit when created, but may become locked up in the circulating capital employed. Circulating capital conditions may result in particular choices of action.*

I. Capital Factors Subject to Change. We have seen that the valuation of circulating assets and the computation of circulating liabilities are of primary importance in considering the measurement of circulating capital. We have not considered the relationship of fixed assets to the circulating capital, except to indicate that the cost of fixed assets deducted from the amount of capital receipts gives the computation of the amount of circulating capital provided from the primary source of capital contributions.

Clearly, therefore, circumstances which alter either the expressed value of the fixed assets or the *quantum* of fixed liabilities (including capital) will affect the *apparent* measure of circulating capital. We emphasize the word "*apparent*" because the *real* measure may have been maintained by other processes considered or to be considered in this work. The effect of capital alterations must, therefore, be studied separately.

The problem is mainly one of the continuance of the capital and of its effective application, but the inevitable changes which involve factors of value, utility, and time, produce reactions against the computation of circulating capital and its produce (i.e. profit). "*Value*" itself involves variations of treatment based on differing conceptions and applications which affect the expression of final results.

The principal changes to be brought under review are—

(a) Replacement of capital (or fixed) assets by similar assets.

(b) Replacement of capital value where similar assets are not acquired.

(c) Non-replacement in some cases.

(d) Redemption of the capital liabilities (Chapter V).

(e) Valuation notions (Chapter IX).

2. **Replacement of Assets.** Physical assets will not maintain a uniform degree of efficiency, and in almost every case there will arise the necessity for ultimate replacement. Even where renewal by parts is possible, there will ultimately arise a necessity for renewing the foundation expenditure. Apart from "wear and tear," there will arise one or more of the following conditions—

(a) Reduced efficiency of the foundation creation.

(b) Supersession of type of assets involved.

(c) Effluxion of time where the interest is a time interest only, such as leaseholds, annuities, etc.

(d) Exhaustion, where extractions for profit reduce the total accessible output, e.g. mines, quarries, etc.

These conditions involve consideration of a problem of renewal. Where renewal is necessary or desirable there will arise the problem of its expense. The original capital receipts were available to meet the original capital expenditure, but ordinarily there will be no such fund of capital receipts available to finance the renewal.

During the period of utility of the asset, called its life, revenue has been acquired by its use, and it is a primary consideration that such revenues should be impressed with a demand for contribution measured by either—

(a) The amount of capital lost meanwhile; or

(b) The cost involved in ultimate replacement.

We shall not consider which of these two measures should be applied until we examine the methods of treatment in accounting operations, noting only the logical fact that capital is subject to loss, so that provision may be made accordingly.

3. "Writing Down" Assets. The common method of dealing with depreciation is to write down the cost of the assets by periodic sums spread over an estimated life, until a zero, nominal or residual value, remains. The amount so written down is, of course, deducted from the profits when ascertaining "net profit."

We shall consider the principles involved by following an example which shows three balance sheets (of the two-account type), marking the process of writing down. The dates of the balance sheets are as follows—

- (a) Beginning of life.
- (b) End of first year of life.
- (c) End of life.

The balance sheets read—

BALANCE SHEET No. 8

	(a)	(b)	(c)		(a)	(b)	(c)
<i>Liabilities</i>	£	£	£	<i>Assets</i>	£	£	£
Capital . . .	5,000	5,000	5,000	Fixed Assets at cost . . .	6,000	6,000	6,000
Loans . . .	3,000	3,000	3,000	Less written off . . .	—	600	6,000
				Written down value . . .	6,000	5,400	nil
				Circulating Capital . . .	2,000	2,600	8,000
	£ 8,000	8,000	8,000		£ 8,000	8,000	8,000
Circulating Capital (brought down) . . .	2,000	2,600	8,000	Stock . . .	—	1,000	4,000
Creditors . . .	—	1,000	2,000	Debtors . . .	—	1,100	5,400
Profits—				Cash . . .	2,000	1,600	600
First year . . . £700							
Less Depreciation . . . 600		100					
Profits finally all paid away in dividends			nil				
	£ 2,000	3,700	10,000		£ 2,000	3,700	10,000

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We shall examine position (b) first. Apparently the available circulating capital has been increased by £600 and a profit of £100 remains for distribution. We prove this by noting that the circulating assets (including cash)—

Total to	£	3,700
Liabilities are recorded at		1,000
		<hr/> 2,700
And profit to be distributed amounts to		100
		<hr/> 2,800
The new circulating capital available being therefore		2,600
The original circulating capital was		2,000
		<hr/> 600
The increase is therefore		<u>£600</u>

This increase is exactly the measure of the amount written off the fixed assets.

We shall similarly examine the more completed condition of position (c) where the fixed assets are reduced to “nil” and the available circulating capital is as follows—

Circulating assets, including cash	£	10,000
Less liabilities		2,000
		<hr/> 8,000
Amount available		8,000
Amount originally provided		2,000
		<hr/> 6,000
Increase in available circulating capital		<u>£6,000</u>

Again, the *apparent* increase in circulating capital is £6,000, i.e. the measure of the depreciation deductions from fixed assets.

We thus reach the first conclusion, viz. that apparently the amount of depreciation deductions from assets and profits tends to provide an equal sum available as additional circulating capital. We must not conclude that such sum is *permanently* available as circulating

capital, but under year to year conditions there is at least a temporary availability attaching to this "fund."

4. Investing Depreciation "Funds." The ultimate demand that depreciation provisions shall be available to finance the replacement of capital assets clearly requires that such funds shall be available in liquid form when so required. The desirability of accumulating investments corresponding to the funded provisions thus suggests itself, but before considering all the aspects of this question we must first note the contrast of two balance sheets prepared as for two businesses having identical conditions at their start but differentiated within the "life" of the capital assets as follows—

(a) No. 1 accumulated annually an investment equal to its depreciation calculations. The whole of the profits after providing for depreciation were distributed.

(b) No. 2 found that increasing volume of trade made demands on finance greater than the capacity of the contributed circulating capital, and rather than reserve any profits from dividends, the directors used the depreciation provisions regularly to finance the growing trade.

The balance sheets read—

BALANCE SHEET No. 9

	No. 1	No. 2		No. 1	No. 2
Capital	£5,000	£5,000	Fixed Assets	£6,000	£6,000
Loans	3,000	3,000	Less written off (in annual amounts)	6,000	6,000
				—	—
			Invested (Depreciation) Funds	6,000	nil
			Circulating Capital	2,000	8,000
	£8,000	8,000		£8,000	8,000
Circulating Capital	2,000	8,000	Stock	1,000	6,000
Creditors	1,000	4,000	Debtors	1,100	5,400
			Cash	900	600
	£3,000	12,000		£3,000	12,000

Company No. 1 may now realize its investment and purchase new assets in place of the old ones, thus restoring the position enjoyed at the beginning of the "life." Company No. 2, however, has invested its depreciation "in the business," and (under more extensive trade conditions) carries greater volumes of stock and debtors, relieved only partly by increased credit received. It is now unable to withdraw its funds for replacement of the assets without contraction of trade. This course may be impossible and even dangerous. It must therefore have recourse to capital sources or bank overdraft facilities to solve its problem.

The contrast brings out at extremes the effects of the two policies, and we ignore the practical conditions which may have forced this difference of action.

The point now to be established is that depreciation provisions form an *apparent* source of circulating capital, but that the availability of such increase of circulating capital is subject to some limitation of time. As a total, its availability is temporary only.

It must be remarked, however, that practical conditions limit the accrual of the position shown in the case of Company No. 2 (Balance Sheet No. 9) in the following manner—

(a) All the assets will not fall to be replaced at one time, so that only a *part* of the employed circulating capital need be withdrawn at any one time.

(b) Some of the intermediate replacements may have been provided during the "whole range of lives," and charged to the asset accounts. Indeed, in some cases an experimental rule is found applying to the renewal of assets sums tending to equal the depreciation provisions.

(c) Alternatively to (b) the actual costs of partial

renewals may have been charged against profits, so that a double burden of depreciation and renewals has been thrown against profits. (See also Chapter VI on 'Secret Reserves.)

(d). A variation of (b) and (c) is to charge against profits a large proportion of any "additional capital expenditure" or "renewals" (say, 25 per cent) in the year of their acquisition, and subject the balance to annual depreciation with the main expenditure at the rates applied to the foundation expenditure.

All the practices show variation in the computation of the profits credited for distribution, and we note that such variation is not a variation of main principle but of methods applied to varying bodies of fact and conceptions of future requirements.

5. Depreciation Funds Separately Stated in Balance Sheets. The points already considered apply equally to the case of balance sheets in which the depreciation funds are separately stated in balance sheets, and to those in which they are wholly or partly hidden by expressions of "net asset balances," or in which the previous net balances are shown adjusted by the present year's transactions and provisions. It is a difference merely of method of statement, therefore, to state the depreciation fund on the liabilities side of the balance sheet, giving the asset value at "cost," and has no operative effect except to give a greater degree of information.

For the purpose of our present examination of balance sheets, however, it is better to set out the depreciation fund total on the liabilities side of the balance sheet. Where the depreciation fund is invested in the business (Company 2) the fund should be placed in the circulating capital section. Where it is invested "outside the business," it should be placed

opposite the investment (and the portion of cash awaiting investment) in the fixed capital section.

Balance Sheet No. 9 (slightly amended in particulars) will then read as follows—

BALANCE SHEET No. 10

	No. 1	No. 2		No. 1	No. 2
	£	£		£	£
Capital	5,000	5,000	Fixed Assets at cost	6,000	6,000
Loans	3,000	3,000	Depreciation Fund		
Depreciation Fund . .	6,000	below	Invested	5,400	
			Depreciation Fund		
			Bank Balance . .	600	
			Circulating Capital .	2,000	2,000
	£ 14,000	8,000		£ 14,000	8,000
Circulating Capital . .	2,000	2,000	Stock	1,000	6,000
Depreciation Fund . .	above	6,000	Debtors	1,100	5,400
	2,000	8,000	Cash (reduced by De-		
			preciation Fund		
Creditors	1,000	4,000	proportion) . . .	900	
			Cash		600
	£ 3,000	12,000		£ 3,000	12,000

The presentation of the Balance Sheet of No. 2 Company above clearly shows the borrowing of the depreciation fund for investment in the business, and thus gives the maximum view of the accruing demand for the introduction or accumulation of further circulating capital.

6. "Wasting" Assets. The capital expenditure of a company may sometimes be represented by a main asset, the value of which may be consumed over a whole term of exploitation, and the form of asset so consumed may not be intended to be replaced and may be incapable of replacement within the company's field of activity. Examples of assets falling under this description are mines, pits, cemeteries, concessions, patent rights, and ships operated by single ship companies. (These assets are styled "wasting assets.")

The material fact of difference in the case of such companies is that any depreciation accumulation will not be required to be used in replacement, as the companies will cease to function at the end of the assets' periods of availability. By the provision of depreciation a surplus would be created which would be paid away on liquidation to the shareholders. In such cases a total omission to provide depreciation of the "Wasting Assets" would merely leave the company finally with lost capital value against its capital, so that the liquidator will not have any assets representing accumulated depreciation provisions to distribute.

A number of cases have been decided in the courts concerning the distribution of dividends without providing for depreciation. These cases make it clear that there is no legal compulsion on directors (apart from the requirements of the company's own regulations) to provide for depreciation of fixed assets, so that persons may become members of companies on such terms as will permit them to lose their capital and enjoy as dividends the full current earnings without deduction for depreciation. Broadly speaking, this condition may be said to apply under the general law to all companies, whether working wasting assets or replaceable assets, but we note now that when the main assets are wasting assets it is perfectly normal as well as legal to avoid the provision against depreciation of the wasting assets.

The position of a company, however, owning wasting assets incidental to the operation of more continuous assets should be distinguished. In one case a mine was operated by a steel company as a source of supply of ore. The ultimate working out of the mine would in this case remove one source of supply of ore, but presumably the company might reasonably continue with

other sources of supply. Clearly in this case the considerations stated as attaching to wasting assets did not fully apply, as the capital so invested would ultimately require to be available to finance a substitute service. The case quoted appears to have been decided by a refusal to consider a "mine" of ungotten "ore" as a fixed asset at all, but as a supply of stock (i.e. a circulating asset), and it is definitely clear that depreciation (by valuation) of circulating assets is a legal necessity in all cases. The legal equation of an "*ore in situ*" and "*ore in stock*" is in conflict with accounting definitions, and it is now hazarded that the subsidiary nature of the mine was the real criterion by which the facts were adjudicated. The company had operated the mine as a service to produce working stocks as an alternative to purchasing periodic supplies of ores, and the failure of one source of supply implied a duty to find a substitute source to carry on its main activities. Had the company existed mainly for the purpose of operating the mine, there is little doubt that it would not (under the general law) have been required to provide for the depreciation of the mine.

This problem is complicated further when one considers the relationship of subsidiary capital assets to the main asset. For example, machinery is not ordinarily considered a wasting asset, but machinery associated with a mine might be considered as acquiring the characterization of the mine, except for "its run of lives within the main life." There is some problem here of renewal of machinery during the life of the mine, not simply as a protection of the ultimate capital but as a factor of its utilization meanwhile. The depreciation problem of any particular case will require consideration accordingly.

7. Basis of Depreciation Calculations. Accounting

textbooks describe varying methods of computation of annual depreciation contributions, each being a formula to distribute the total prospective capital loss among the accounting periods falling within the life of the asset. The variations of distribution are characterized as follows—

(a) Progressive distribution by charging to revenue—

(i) Equal amounts in each period.

(ii) Amounts reducing in each successive period, but following a series.

(iii) Amounts increasing in each successive period, but, similarly, following a series.

(b) Irregular distributions—

(i) Accidental contributions based on year to year valuation notions.

(ii) Casual provisions or mixed provisions operating through any other cause.

So far as real progression is adopted as the basis of calculation, the underlying principle is to spread a total demand equitably or prudentially over a period not longer than the life of the asset.

The variation of these methods is not simply concerned with any notion that depreciation can be *measured* from year to year (except by annual valuations where actually applied), but with an idea of measuring equitable contributions for charge against each period's operations or profits. In deciding which method of calculation to adopt, attention will therefore be paid to surrounding consideration as well as to any principle thought to apply to depreciation simply. These considerations, therefore, involve "adjustments of profits" which affect the measure of the record of distributable profits. These adjustments we have seen form a fund of savings designed for further application, and do not ordinarily, or *per se*, affect

the flow of profits of any intervening period, so that such savings attach to the circulating capital meanwhile. We may accordingly conclude that one of the considerations governing the selection of a method may be the assistance required in the form of further circulating capital. Indeed, a common view adopted seems to choose a basis of annual contribution thought generally to tend to average out the risks of other facts, such as repairs, renewals, partial supersession, etc.

One method, the insurance policy method, however, does provide a positive measure of forced adjustment of profit. According to this method there is drawn annually a premium to provide a capital sum at the end of a period certain, so that assuming that such sum is adequate in amount and due to accrue exactly at the end of the life of the asset, the actual measure of the premium is the actual measure of the depreciation provision proper to be charged to the profit and loss account. Calculation of accruing interest on such policies or policy values may complicate actual practice, but are not demanded by any principle relating to depreciation, and, in fact, form a further adjustment of profits, the justification for which must be sought in relation to matters other than depreciation.

We pass with little more than a note the occasional practice of providing depreciation out of good profits and omitting such provision when profits are low. We may not defend such a practice in general, but at least we may note that it does not disguise the method of "adjusting profits" so effectively as do other methods. Such a policy must, however, depend upon the final result for its justification.

8. Should Depreciation Cover Cost or Replacement Value? We have considered depreciation as a problem

of replacement, i.e. of ensuring continuous equipment. If replacement is, however, not intended to be *in specie* or in the form of a substituted service, clearly the problem is limited to considering the necessity for replacing the amount of capital invested, i.e. the cost of the original asset.

If, however, there is to be a real replacement, i.e. a repeated cost, the problem of the repeating cost is real. If the cost of replacement is expected to be equal to, or less than, the cost of the original asset, a provision of total depreciation equal to the original cost will cover all points at issue, though it may leave a balance of "savings" available as circulating capital, or, in extreme cases, as surplus to requirements.

If the replacement cost is estimated to be greater than the original cost, does such an estimate involve providing a depreciation saving equal to such cost of replacements? The question is, of course, of an academic character mainly as practical conditions will "average out" its importance, but we face the problem as a step in considering the justification of further "adjustments of profits." We assert, therefore, that simple reasoning makes a demand for such a treatment, but offset this assertion by stressing the practical difficulties which limit its positive application, viz.—

(a) The impossibility of correct estimates of a life or future costs.

(b) The annual variation of estimates which would be applied.

(c) The averaging effect of some items being "over depreciated," thus offsetting these "under depreciated."

(d) The possibility of piecemeal replacement allowing excess replacement costs to be thrown against profits or reserves.

The reality of the problem is, however, at the root of certain accounting practices which tend to be justified, in part, by the consideration so dismissed. These practices are—

(a) Shortening the notional life by overstating the annual rate of depreciation, leaving the “surplus life” to provide such suitable surpluses as may be desired.

(b) Equating lives of groups of assets in such a way that the earlier provisions are excessive, particularly where on renewal some of the renewed short life assets are charged against profits.

(c) Including non-replaceable parts of assets together with replaceable parts in a total depreciation statement; or including, similarly, some items such as loose parts of machinery, notwithstanding that the replacement of some loose parts will be charged to revenue as they arise.

(d) Creating contingency reserves (see Chapter VI).

CHAPTER V

REPAYMENT OF CAPITAL

ARGUMENT. Repayment of capital loans out of current moneys forces the creation of a reserve of profit, because the measure of current moneys so applied is the measure of profit which has been capitalized and is not available for distribution.

1. Capital and Loan Capital. Accounting and economic definitions of capital must give way in the present treatment to the narrower legal conceptions of capital, i.e. the series of contributions made by subscribers to provide the finance for equipping a business. Any such series will be the subject of varying legal rights embodied in contracts, defined by statutes, or otherwise attached to the shares, etc.

The term "Capital" is strictly confined to the contributions from legal proprietors and (generally) is at continuous risk in the business. Repayable contributions, though used for capital purposes, are not permanently at such risk and are therefore not capital proper. However, their association with capital purposes (a primary consideration in our present survey), gives them occasionally the title of "loan capital." Some public undertakings are entirely financed by capital provided in the form of redeemable loans.

Even proprietors' capital may in part be repayable under the provisions of the Companies Act, 1929, and we shall deal with this class separately in this chapter.

Repayable capital, for the purpose of our first examination, is typified by debentures, debenture stock, fixed loans, bonds, and so on. These are generally subject to repayment during, or at the end of, a term of years.

2. **Loan Capital and Circulating Capital.** We have seen that the circulating capital of a business is primarily provided as the excess of "capital" receipts over capital payments, and that the continuing excess of such capital receipts over capital expenses is part of the actual or operative circulating capital.

Clearly then where any part of such capital receipts is due to be repaid there is, to the extent of such repayment, a withdrawal of part of the liquid finances which otherwise would be available as circulating capital. As, presumably, the original capital was raised in measure to create a balance of circulating capital (and, let it be granted, the measure of circulating capital required is not subject to reduction), any repayment of capital, if not offset in measure by other accumulations out of profits, will contract the circulation power.

Separately considered, the repayment of a loan does not affect the fact or measure of profit, but, as it is impossible to distribute profits by withdrawal of cash and to apply the same cash in repayment of loans, the *availability* of the profits for distribution may be said to be limited by the compulsory repayment of the loans.

We shall illustrate this point in Balance Sheet No. 11 on page 51, in which we assume—

(a) That the end of the term of the loan provision has arrived.

(b) That the whole of the profits made have been distributed, and the loan maturity conditions have been ignored.

(c) That reborrowing facilities may be ignored in our primary considerations.

It will be clear that the maturing of the loan liabilities creates an apparently impossible condition only capable of relief by recourse to borrowing (either in the form

BALANCE SHEET No. 11

	(a) Position if Loan Repay- ment not Matured	(c) Position Produced by Matur- ity of Loan Re- payment		(*) Position if Loan Repay- ment not Matured	(b) Position Produced by Matur- ity of Loan Re- payment
Capital	£ 5,000	£ 5,000	Fixed Assets	£ 6,000	£ 6,000
Loans continuing . .	3,000	—	Contributed		
Shortage of Work- ing Capital	—	1,000	Working Capital . .	2,000	—
	£8,000	6,000		£8,000	6,000
Contributed Circu- lating Capital	2,000	nil	Sundry Circula- ting Assets and		
Current Creditors . .	2,000	2,000	Cash	4,000	4,000
Loans due for Re- payment	—	3,000	Deficiency of Cir- culating Capital . .	—	1,000
	£4,000	5,000		£4,000	5,000

of further term loans or by means of a bank overdraft) or by the introduction of new capital.

The position shown in columns (b) must be clearly distinguished from one involving merely a necessity to pay circulating liabilities, because in the case of the latter there is always some provision of circulating capital to finance the circulation and there is substituting credit available in the overlapping cycles of transactions. Under normal conditions credit tends also to normal volume and thus to a normal measure of relief of capital necessity. The accrual of demands for loan repayments, however, is a forced condition which affects the current credit position fundamentally by tapping the liquid resources as they flow through the circulation.

3. **Adjusting Profits to Finance Repayment of Capital Loans.** Instead of acting as indicated in Balance Sheet No. 11, the company would probably have carried out one or other of the following measures.

(a) Repaid its loans by instalments and contracted its dividends *pro tanto*.

(b) Accumulated (by reducing its distributions of profit) a fund called a sinking fund, designed to accumulate an amount equal to the amount of loans repayable at the date of repayment.

(c) Created general reserves at least equalling the amount of the loans at the repayment date (see Chapter VI).

(d) Created hidden reserves (see Chapter VI) to offset the expected demand.

All such measures adjust the record of profit in measure of the part not distributed, so that assets are retained to maintain the circulation of capital. Such adjustments of their nature should be made in the profits appropriation account, i.e. the final summary account to which annual results of profit or loss are transferred, but we note in passing that this is not always done and particularly where any of the following conditions arise the adjustments may be found in the profit and loss account.

(a) The creation of a sinking fund is forced by the loan contracts; or

(b) Hidden reserves are resorted to; or

(c) (Sometimes), where interest and loan repayments are paid in the form of a joint payment, such as an annuity (e.g. payments under a building society mortgage); or

(d) Where the accumulation is not directly calculated to the repayment conditions, or where the rate of accumulation forms an irregular series of provision.

(e) Where intermixed elements are provided for by an omnibus charge (e.g. contingency reserves), or where excess provisions under one head tend to compensate for the non-provision of other specific

requirements (e.g. excess or notional depreciation provisions).

These points will be considered more appropriately in Chapter VI, and we shall deal in this chapter with the specific provisions due to be made in respect of loan redemption conditions.

4. **Gradual Repayment of Loans.** We shall assume a simple series of transactions in relation to a loan debt raised and involving the following incidents—

(a) One-third is repayable annually.

(b) The profits are adjusted annually by withholding a sum equal to the amount of debt redeemed, but, except for this, all profits are distributed.

The initial and the succeeding balance sheets are as shown on page 54, but all factors not related to loans are treated as recurring in equal amount exactly from year to year.

It will now be clear that the circulating capital has been maintained by withholding £1,000 from each year's profits and accumulating it as an additional fund of circulating capital. This accumulation, of course, remains a profit in its nature but is invested in the business as essential circulating capital. It is therefore a proprietors' surplus serving a capital purpose and associating itself in reality with the value of the subscribed capital, to which it forms an addition in value, though not in name. It is, of course, possible to convert this surplus into bonus shares or transfer it to meet an uncalled liability on the shares, but apart from these special methods it is not (*prima facie*) available for distribution in the form of dividends.

It is sometimes said that such a balance, being profit, may be transferred to reserve. As a mere book-keeping entry this may be done, but such profit is

BALANCE SHEET No 12

	Ini- tial	End of Year 1	Year 2	Year 3		Ini- tial	End of Year 1	Year 2	Year 3
Capital raised	£ 5,000	£ 5,000	£ 5,000	£ 5,000	Fixed Assets at Cost . Circulating Capital .	£ 6,000	£ 6,000	£ 6,000	£ 6,000
Loans outstanding	3,000	2,000	1,000	—		2,000	2,000	2,000	2,000
Accumulated profits withheld from distribution	—	1,000	2,000	3,000					
	£ 8,000	8,000	8,000	8,000		£ 8,000	8,000	8,000	8,000
Profits of Year	—	2,500	2,500	2,500	Cash and other assets after paying dividends and part of loans				
Less Dividend paid	—	1,500	1,500	1,500		2,000	4,000	4,000	4,000
Less transferred above	—	1,000	1,000	1,000					
Balance of Profits (nil)	—	—	—	—					
Circulating Capital as above	2,000	2,000	2,000	2,000					
Creditors	—	2,000	2,000	2,000					
	£ 2,000	4,000	4,000	4,000		£ 2,000	4,000	4,000	4,000

nevertheless a *capital* reserve, and as general reserves are in some measure considered as profits which may be distributed, it is a questionable practice to transfer this accumulation to a reserve of general description. The desirability of ear-marking such an accumulation as a capital reserve therefore suggests itself, even if current commercial practice has not (apart from the special provisions of the Companies Act, 1929; see pages 62 to 65) adopted this method.

It is also urged that such a "fund" may be used to provide depreciation deductions. This is sound only so far as the assets so subject to the deduction are not of their nature due ultimately to be replaced, but when ultimate replacement will arise the "fund," not being in liquid form, will provide no financial relief against the costs of replacement, so that the conditions described in the preceding chapter will then arise.

A note is necessary to indicate that the above treatment deals with repayment at par. Where repayment is at a premium or at a discount the measure of the total "charge" against profits is the measure of cash applied, but when a premium is involved the premium represents real loss and should be charged as such, though averaging irregular premium payments over the whole period is not improper apart from other prudential considerations affecting the circulating capital conditions. Where a discount is earned by redemption it is not improper to restrict the "charge" against profits to the actual amount of cash withdrawn, but here again ordinary prudential rules will result in such profits on redemption being carried to a reserve as a "capital profit" or at least being set-off against premium losses on other transactions.

We illustrate below the debit and credit entries involved in all three methods, the letters (a) and (b)

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connecting the two sets of double entry postings in each case—

	Redemption at Par (100%)		Redemption at a Premium (105%)		Redemption at a Discount (95%) ¹	
	<i>Dr.</i>	<i>Cr.</i>	<i>Dr.</i>	<i>Cr.</i>	<i>Dr.</i>	<i>Cr.</i>
	£	£	£	£	£	
<i>Dr.</i> Profits appropriation (a)	1,000		1,000		1,000	
<i>Dr.</i> Loans . . . (b)	1,000		1,000		1,000	
<i>Dr.</i> Profit and Loss (or Suspense), Loss on Redemption . . . (a)			50			
<i>Cr.</i> Cash . . . (a)		1,000		1,050		950
<i>Cr.</i> "Repaid Debt Re- serve" . . . (b)		1,000		1,000		1,000
<i>Cr.</i> "Profit on Capital Re- demption" . . . (a)						1 50
	£2,000	2,000	2,050	2,050	2,000	2,000

5. Redemption of Loans Following Operations of Sinking Funds and Reserve Funds. There is little significant difference between the annual entries described in paragraph 4 and those relating to moneys associated with a sinking fund, so long as the annual sinking fund provisions are paralleled by annual external investment. Obviously the placing of actual liquid assets aside to redeem a debt in total produces final results similar to those arising from gradual repayment. Interim differences in relation to interest on the loans and the investments may be noted, but do not affect the main points under present consideration.

Omission to make the investment of the accumulations, or, as it is sometimes described, the process of investing the accumulations in the business, may lead to a position of financial stringency when the date of redemption arises. This position, however, will not usually arise where sinking funds are formally created and calculated to cover the prospective needs, as the

¹ These items may be expressed net (£950) when the discount is not intended to be reserved separately.

statement of the sinking fund operates as a reminder of an approaching obligation. Where, however, a reserve fund is created and is thought to cover the redemption requirements *inter alia*, the ultimate position of need for withdrawal of liquid resources, failing the renewals of borrowings, may arise. This position will be reconsidered in Chapter VI.

Where, however, a sinking fund or reserve fund is used finally to discharge capital debts, a transfer should be made from such fund to a capital reserve account equal to the amount of the "capitalized profit." The basis of the calculation is, of course, the amount of money applied subject to the further treatment of the following factors—

- (a) Any discount earned on redemption.
- (b) Any premium paid on redemption.
- (c) Profit or loss on realization of the specific investments accumulated for the purpose of the redemption.
- (a) Any discount on redemption remains in the sinking fund (or reserve fund), and represents *per se* an excess saving of profits. Considered alone, such profit is, of course, free profit, and may be treated as such or transferred to any fund of profits accumulation, e.g. general reserve, or (so long as it is clearly shown as a particular profit and not a profit proper to the year of account) to the profits appropriation account. It is considered better in such cases, however, to capitalize an amount equal to the amount of the cancelled debt, i.e. capitalize the discount saving.
- (b) Any premium paid on redemption will be paid either as one term of the contract for redemption of the whole series, or as a special provision produced by special contract at the time of redemption. When the obligation is part of the original contract it is clear that such premium should be provided for

annually during the loan term as a loss to accrue, so that, when the loss accrues, it will be covered by a premium on redemption fund. If, however, a composite sinking fund has been created (i.e. to cover both loan and redemption premium), the premium should be written off to the sinking fund and only the par value of the debt treated as capital profit.

Where, however, the premium was not the subject of original contract but of special contract, the premium is a special loss and should be charged as such. If there be previous profits in the sinking fund, they will be available so far as they go to cover such loss, but otherwise some fund of profits or the actual profit and loss account (or profits appropriation account) must be charged with the premium. It may, of course, be permissible, if the cash position allows, to treat such a premium as suspense expenditure (see Chapter II), particularly where future interest conditions are relieved by the redemption, or where the redemption is a step in a scheme of re-organization. Subject, however, to these points it must be classified as an actual loss.

(c) Profit or loss on realization of securities may most appropriately be transferred in the first instance to the sinking fund itself, so that any profit in the sinking fund is applied to meet any such loss of investment value, and any profit on investment realization may be treated as a profit on the sinking fund and dealt with accordingly. Any *final* loss on a sinking fund must be made good in manner similar to that considered in relation to a premium on redemption of debt. Similarly, any final profit in a sinking fund may be considered in the manner set out in relation to redemption of debt at a discount, i.e. it represents (*per se*) a free reserve, and not capitalized profit.

The elimination of all these factors of precise adjustment by the accumulation of a covering reserve may now be illustrated as it might be carried out in common practice.

Balance Sheet No. 13 gives the position of a company about to redeem the balance of its loan debt by liquidation of some of its reserve fund. Earlier partial redemption of debentures is shown (at cost) separately on the assets side to make the detail clear for the purpose of the present example.

After making the entries indicated on page 60 the balance sheet will read as set out (No. 14) on page 61 (and we state it to show the circulating capital portion in parallel with the original position when the capital was issued).

The example shows clearly the amount of final free reserve available (subject to trading conditions) for general purposes or other specific circumstances not here considered.

We now make a reference to the possibility of utilizing sinking (or reserve) funds to acquire debentures during their term, subject to re-issue. Such a proceeding is, of course, quite sound if justified by interest conditions, as, in addition to probable interest saving, such debentures form an investment which at the time of redemption will not carry the risk or expense of their liquidation, though, *per contra*, a profit on later redemption may be lost. It is not usually considered proper, however, to enter such holdings as assets on the assets side of a balance sheet, but to enter them as deductions (at par) from the debentures issued.

Readers who turn their studies to the mathematical basis of such funds will not fail to remember that where sinking funds are drawn upon in order to redeem debt before maturity, the loss of the earning power of

BALANCE SHEET No. 13

Capital	£ 50,000	Fixed Assets	£ 80,000
Debentures Issued	40,000	Suspense Account (cost of redeeming £10,000 Debentures, to date)	9,500
Reserve Fund (covering Sinking Fund and all purposes)	50,000	Investments (on account of Reserve Fund)	30,000
Creditors	10,000	Floating Assets	35,500
Profits	10,000	Cash	5,000
	<u>£160,000</u>		<u>£160,000</u>

NOTES

- (a) The remainder of the debentures to be repayable at par.
(b) The investments to realize (net) £29,750.

BOOK ENTRIES

Debit			Credit	
(i) <i>Re</i> Earlier Redemption—				
Debiture Debt	£ 10,000		Capital Reserve (Debentures Redeemed)	£ 10,000
Reserve Fund	9,500		Cost of Redemption (Suspense Account)	9,500
(Note that this leaves the profit on redemption in the Reserve Fund, and thus the coupling of the entries above is the shorter method of recording this result.)				
(ii) <i>Re</i> Present Redemption—				
Cash (actual realization)	£ 29,750		Investments	£ 29,750
Reserve Fund (loss on realization)	250		Investments	250
Debiture Debt	(b) 30,000		Cash	(a) 30,000
Reserve Fund (a)	30,000		Capital Reserve, (Debiture Redeemed)	(b) 30,000

(Note that these figures may be coupled (a) with (a) and (b) with (b), but as (a) and (b) here contain identical figures, the order above is the more capable of easy interpretation. Had there been a profit or loss on redemption, item (a) with item (a) and (b) with (b) would have left the profit or loss in the Reserve Fund.)

the investments realized must be made good to the sinking fund. The practice sometimes followed of crediting to the sinking fund the interest which would have been paid on the debt but for the redemption, follows a sound main principle, though the proper measure of the adjustment is not that of interest saved, but that of interest on the amount withdrawn from the sinking fund calculated at the rate adopted in settling the amount of the annual contributions. The rate adopted in the sinking fund calculation is, of course, a rate based on the safe return expected from proper investment, which will almost invariably be less than the rate of interest paid by the company on its own debentures. Consequently, when a greater interest on cancelled debt is credited to a sinking fund in lieu of lost earnings, there is an excess contribution generally tending to a final profit in the sinking fund. Such excess, however, is truly profit in a current sense when considered apart from all other considerations. Whatever measure of interest be so credited, however, it should properly be charged as an appropriation of profits, not as an expense against profits.

Finally, we call attention to the fact that the above outlines show that, in the expression of profits available in a balance sheet, future considerations concerned with the expected redemption of debt provide several examples of "adjustment of profits" from primary calculations to record a different measure as "distributable profits."

6. Redemption of Preference Shares. Since the passing of the Companies Act, 1928, powers are available to limited companies to redeem preference shares, and accounting adjustments somewhat similar to those described in the preceding two sections of this chapter are now enforced by Sect. 46 of the Companies Act, 1929.

Preference shares may now be redeemed (if the company's regulations allow), either out of profits or out of the proceeds of a new issue, and may be redeemed at a premium or at par.

When redemption is made out of the proceeds of a new issue, no point of special association with the present text arises, except that any premium paid away must be provided out of profits (i.e. including accumulated profits).

Where, however, the redemption is made otherwise than out of the proceeds of a new issue, it is enacted that there must be transferred from profits (i.e. including accumulated profits) to a "Capital Redemption Reserve Fund" *a sum equal to the amount applied in redeeming the shares.*

Where such sum is the par equation of the shares no difficulty will be experienced in recognizing this statutory demand for the application here of the principle of accounts described above in paragraphs (4) and (5) in relation to loan capital redemption, except to emphasize that the special reserve fund demanded may not henceforth be treated as available for dividends or to offset revenue or capital losses, but is required to be maintained as a balance sheet entry, subject to reduction only on terms similar to those applying to the reduction of capital, i.e. involving sanction of the court. Bonus shares may be issued against such a fund, however. Both the primary statutory requirement and the bonus shares alternative, be it noted, capitalize such profits in as permanent a form as that which characterizes share capital.

The terms of the Act relating to preference share redemption out of profits appear to leave a difficulty for solution when the shares are redeemed at a premium. The section requires a book-keeping transfer to be

of a new issue, the premium is specifically required by the Act to be written off against profits.

If, in the example we cite, we are required to write off the premium against profits, we are forced to adjust profits by £120,000 of which £110,000 is marked as capitalized and £10,000 as lost. Clearly the actual capitalization of profits is measured by the shares redeemed, i.e. £100,000 and £10,000 is a loss or sacrifice of actual profits. Only £110,000 is involved in all.

The Act therefore appears to prevent the actual writing off of the premium against the capital redemption reserve fund, and the premium balance will require to be stated as an asset until it is written off against *other* profits. It should not be concluded that the premium should be written off at all, notwithstanding that a premium paid where capital is repaid out of the proceeds of a new issue must be written off, and it is quite sound financially to leave the premium standing as a "Fictitious Asset" offsetting in fact, though not in form, the surpluses appearing on the liabilities side (including the capital redemption reserve fund). The full historical description of the transaction is thus assured. To write off such premium may be considered as a measure of prudence based on notions of valuation, etc., but such measures of prudence are determined by surrounding circumstances and not primarily by the nature of this circumstance considered alone.

7. Redemption of Other Liabilities. Short loans or bank overdrafts are a form of temporary capital to which some reference must be given. In the general case, however, specific sinking fund accumulations are not accumulated against the repayments of such loans. This is primarily due to the fluctuation in amount of the loans, and the common fact that at some later

date further capital or loan capital may be raised to repay the bank overdraft liability. In cases where it is intended to depend upon current receipts to provide for the repayment of bank loans, reserve funds or other accumulations of undistributed profits will be provided to secure the circulating capital conditions generally, and will thus offset the facts of repayment. (See next Chapter.) This implies normally, however, that some of such funded profits will become non-available for dividends, so that that measure may very properly be considered as subject to accumulation in an account to remove them from the funds of profits apparently available for distribution.

Similarly, other current liabilities will involve continuous substitution so long as credit conditions remain normal, but any reduction of credit facilities below the normal involves similar reserve considerations. These problems, however, are concerned with the adequacy of the amount of the circulating capital finally, and have been dealt with in Chapters I and II.

8. Sinking Fund Accumulations in Relation to Depreciation Funds. Where loan capital has been raised to finance the acquisition of fixed assets, there is a two-fold consideration in relation to profit adjustments. We have seen (Chapter IV) that replacement of assets involves the creation of a depreciation fund, whilst the repayment of loans involves the creation of a loan redemption surplus. Thus one primary capital necessity may thus cast two burdens against profits.

Let us suppose that in such a case the loan capital raised were repaid within the life of the asset, so that further funds could similarly be borrowed to finance the ultimate replacements. Will it be strictly necessary to provide the double accumulation?

If this question could be considered without reference to other conditions the answer would clearly be in the negative, and in the case of local authorities whose experience of this type is continuous, the double burden is not, in the case of long-life assets, cast on the revenues or local rates.

Commercial businesses, however, seek to build up the continuity of their own lives and to consolidate and improve their capital resources, and it is in line with such policies that profits should always be looked to as the source of replacement of assets. This larger and longer view so governs the case that the double burden will be faced. In municipal finance, however, there is a limit beyond which the current ratepayers will not be taxed to provide debt-free assets for their successors. In some measure these gifts from generation to generation are constantly being provided, as some of the assets have lives considerably longer than the period during which the relative loans are repayable, and the quasi-permanency of the undertakings justifies the casting of renewal demands upon future rates or revenues. Commercially, however, future risks and time factors involve protective provision, as future utility and revenues are not so easily capable of forecast as in the case of public undertakings, and may be said to be subject to a greater measure of risk.

The point, however, bears upon the supposed valuation demand for writing down non-replaceable and "fictitious assets." Clearly in such cases the double burden of "notional depreciation" and "capital redemption by the creation of surpluses" need not be enforced so far as the facts balance in their measures. A company, therefore, with a debenture issue and also a capital expense under such heading as goodwill may

consider that any necessity for writing down goodwill, etc., is offset in measure by any sinking fund provision it makes in relation to debt redemption (note Chapter VI, paragraph 9, bearing hereon, and also the valuation principles set out in Chapter IX).

CHAPTER VI

RESERVES AND RESERVE FUNDS

ARGUMENT. *Reserves and reserve funds are measures of profit set aside as savings to meet risks, some certain, some merely possible. If the funds be not invested they form part of the available circulating capital, though, sometimes, only temporarily.*

1. **Reserves.** A reserve is a part of the revenues of a business detached to provide a "fund" of profits and withheld from distribution, and is thus available for some immediate or ultimate use.

We have seen in Chapter I that profits form a fund corresponding to the increase of "net circulating assets" (including cash). "Net circulating assets" means the sum of the circulating assets minus the sum of the circulating liabilities. To make a reserve is to reduce such calculation of profits (generally) by entering a sum among the liabilities, styled a reserve, provision, or fund.

We have seen similar adjustments in relation to depreciation (Chapter IV) and sinking funds (Chapter V), and indeed depreciation and sinking fund provisions are capable of description as reserves.

A fund or reserve, it may be noted, is not a thing or money, but a measure of demand against money, i.e. a liability which if not discharged by actual application or loss of value will form a liability accruing to the proprietors as surplus. This characteristic of liability, a fund or reserve, shares with share capital undistributed profits and unclaimed liabilities. Reserves are, however, associated with the things or cash existing at the time of their creation, and such reserves are

created by provisions which restrict the payment of cash by way of dividend. We may, therefore, assume for general purposes, that at the time of making a transfer to a reserve we enable its equivalent measure of cash to be retained from distribution, and hence, *prima facie*, to be applied according to any necessary or desired policy.

We shall examine a balance sheet to consider the general relationship of reserves to cash before considering the different types of reserves.

Suppose in Balance Sheet No. 15 we find the following facts represented—

- (a) The position at the beginning of a year of trade.
- (b) The position at the end of such year subject to the creation of reserves.
- (c) The position (b) adjusted to show the payment of some of the profits as dividend and the reserve of the remainder.

In position (b) a profit of £1,000 is shown, and had a dividend of £1,000 been paid away it would have eliminated the figure of £1,000 profit on the liabilities side of the balance sheet and reduced the cash balance from £2,000 to £1,000. In position (c) we note that only £600 was paid as dividend, so that the cash is reduced to £1,400 only. £400 cash is thus protected, and this is the measured result of earmarking £400 of the profits as transferred to reserve.

2. Classification of Reserves. The item “balance reserved £400” (in Balance Sheet No. 15) is clearly paralleled by a cash retention of £400, and such retention may be intended for application to—

- (a) A specific purpose; or
- (b) A contingent purpose; or
- (c) A general purpose; or
- (d) A mixed or undefined purpose.

BALANCE SHEET No. 15

	(a)	(b)	(c)		(a)	(b)	(c)
Capital	£ 5,000	£ 5,000	£ 5,000	Fixed Assets	£ 6,000	£ 6,000	£ 6,000
Loans	£ 3,000	£ 3,000	£ 3,000	Contributed Circulating Capital	£ 2,000	£ 2,000	£ 2,000
	£ 8,000	£ 8,000	£ 8,000		£ 8,000	£ 8,000	£ 8,000
Profit made				Cash prior to dividend	£ 2,000	£ 2,000	£ 2,000
Less Dividend paid		£ 1,000	£ 1,000	Less paid as Dividend			£ 600
Balance Reserved			£ 400	Stock	£ 2,000	£ 2,000	£ 1,400
Creditors		£ 1,000	£ 1,000	Debtors		£ 1,000	£ 1,000
Contributed Circulating Capital	£ 2,000	£ 2,000	£ 2,000				
	£ 2,000	£ 4,000	£ 3,400		£ 2,000	£ 4,000	£ 3,400

The specific purpose may be either—

- (i) An expense or loss incurred, but unascertained in exact amount; or
- (ii) An expense to be incurred at a future time in relation to which a present contribution is made; or
- (iii) A contribution by way of equalizing the incidence of an expense from year to year; or
- (iv) A cover against a real or supposed shrinkage in value of one of the assets recorded in the balance sheet.

A contingent purpose may be—

- (i) A risk of known nature but unknown amount, or uncertain time of maturity; or
- (ii) Risks generally, or of a class.

A general purpose is one which is not particularly described, but includes a purpose proper for capital provisions, e.g. the strengthening of circulating capital.

3. Specific Reserves.

(a) **LIABILITY RESERVES.** A liability reserve is of its nature a compulsory provision. If the actual liability were known in amount and other detail it would be entered specifically in the accounts and the necessity for creating a reserve (in estimated measure) avoided. Such a reserve serves therefore to enter an estimate of fact when the facts are not capable of exact measurement. These reserves are not in essence adjustments of profits, as they should be included as expenses before profit may be properly calculated. The margin of error in the estimate may, for practical purposes, be ignored, subject to later remarks on deliberate over-estimation.

Specific reserves are invariably described in terms of expense or loss headings, such as accrued charges, purchase reserves, bad debts reserves, pension funds, etc.

(b) RESERVES FOR FUTURE EXPENSES. These are only different from (a) in that the liability has not yet matured, but it is thought proper to provide out of the profits of a present period a contribution towards a future expense, generally of long period recurrence, e.g. triennial painting. Such reserves are "coloured liabilities" because the actual liability may not accrue, though in the ordinary course of continuity they may be almost inevitable. Examples of these reserves vary in degree of probability of accrual of the liability, but the fact of expected liability attaches to them all. Examples are leasehold dilapidation reserves, renewals funds, etc.

(c) EXPENSE EQUALIZATION RESERVES. The uneven or irregular occurrence of certain expenses from year to year, such as repairs, advertising, etc., results in the practice of making charges to successive profit and loss accounts to secure an equitable annual distribution of these burdens over successive profit-earning periods, so that the weight of the actual expenses may not fall disproportionately or unevenly against current profits in the years of actual incurrence. Where such expenses are incurred in any year in a measure exceeding a normal year's burden, they are charged wholly or partly to the equalization reserves instead of making a full charge against the profits of the year of incurrence. These equalization reserves are not always coloured liabilities, but tend by their nature and association with a mixture of facts to conform with that description.

(d) ASSET VALUE RESERVES. So far as these reserves are set against fixed assets they have been dealt with under heading of "Depreciation" in Chapter IV. Our attention is therefore now confined to reserves set against convertible assets, such as book debts and stock. As this type of reserve is primarily concerned

with the possible loss on liquidation or user of the asset, and the asset has been valued elsewhere to ascertain the profit, such a reserve is primarily a measure of profit estimated to be non-receivable, i.e. a loss. It is the customary practice to deduct such a reserve from the gross statement of the asset causing the reserve, and indeed it is sometimes argued that notions of valuation demand this treatment. So far as such reserves are in real measure of the estimates of future loss on such assets, the demand is logical, but where reserves are calculated with reference to policy only, and not to the real measure of loss, deduction from asset values is not, in the writer's opinion, demanded. A frank deduction declared in the balance sheet is, of course, not misleading, but where the deduction is hidden, and a supposed net asset value expressed, the final statement is not frank or real as a valuation. This latter aspect will be considered later under "Secret Reserves."

4. **Contingency Reserves.** Little generalization need be given on these, and the remarks made in reference to specific reserves apply to these so far as the nature of the contingencies allows. Contingencies are, of course, proximate or remote, and some may be so remote as to equate this class of reserve to general reserves, which are dealt with hereunder. A general description of "Contingency Reserves" in a balance sheet is, of course, not frank in its statement, as "probabilities" may not be distinguished from "possibilities." The statement of specific contingencies under suitable headings, or at least under some heading indicating that a liability or expense is rather more probable than merely possible, is desirable if balance sheets are to be informative. There may be sound reason for not *publishing* the nature of such a reserve, for instance

in the case of reserves to cover the possible loss of a threatened action. Contingency reserves are quite a source of semi-hidden resources, but may, *per contra*, conceal the extent of a real risk at stake.

5. **General Reserves.** A general reserve is, as its name implies, a fund of profit set aside for general purposes, but "general purposes" may be a term of inclusiveness, so that instead of multiplying specific reserves, some part of the "general" reserve may be thought to cover any matter short of a measured liability, such as—

- (a) Expense equalization.
- (b) Asset amortization (see Chapter IV)—
 - (i) Replaceable; or
 - (ii) Non-replaceable.
- (c) Contingency provisions.
- (d) Debt redemption (see Chapter V).
- (e) Dividend equalization.
- (f) Internal insurances.
- (g) Additional margin of circulating capital, or compensating margin, where current resources have been reduced by supplementary expenditure on fixed assets, or delayed circulation factors.

(h) Simple undivided profits.

Fundamentally, a general reserve is a fund of profit not impressed with any purpose, and any measured conditions of the above description may well be considered to be attachable *pro tanto* as specific labels. The most common cases in practice result in the creation of a general reserve capable of carrying such of the elements (a) to (g) above) as may require to be met but not separately provided for, without measuring any one, or group, of them separately.

We have seen that reserves are measures of adjustment of profits from their primary calculation, but

reserved profit is still profit except so far as the reserve is in fact an offset against some possible loss, or some loss, now contemplated, but the measure and incurrence of which is determinable by future events.

Reserves, therefore, must be considered by reference to all the surrounding conditions affecting the business, and nomenclature attached to reserves does not give a conclusive interpretation, as factors of time and amount, and classes and measures of risk, and so on, must be taken into account.

The choice of description of a reserve is affected also by problems of outlook. A board of directors may well refuse to make a generous contingency reserve against a particular risk, which will give them the ultimate pain of describing the release of any excess when the contingency is passed or matured, whereas a "general" reserve or fund of undivided profits would allow the matured expense to fall with little or no explanation as to the excess cover.

All the remarks of this chapter tend to establish that the creation of reserves follows little exercise of a defined technique, except as to the cover of liabilities actually expected to accrue. Some of the elements covered by reserve may refer to conditions involving computations between maxima and minima or even exactly, but a transfer to reserve must not always be considered as a saving of free profit, just as a "coloured reserve" need not necessarily be taken to exclude entirely the character of profit.

6. **Investment of Reserves.** A reserve may or may not be paralleled by equivalent investment of money. A general demand that such investments are necessary and a general negation that such investments are necessary are both erroneous. Sometimes it is urged that the use of the word "fund" after the word

"reserve" is improper unless the "fund" is offset by liquid resources invested or retained in liquid form so as to make the reserve effective at the time of its necessary application. It may be regretted that such a technical connotation of the word "fund" has not received general acceptance, but we note that a "Capital Redemption Reserve Fund" (see Chapter V) is not of its nature so offset by investment, so that the Companies Act has helped to defeat the attempted creation of a technical distinction.

The problem of investment is related to the question of availability of the funds. Where a specific need is covered, clearly cash must be available when the need accrues, so that a saving fund to meet an ultimate liability (e.g. debt redemption) must ultimately be paralleled by liquid resources. Similarly, a fund, the income of which is required to cover certain risks (e.g. insurance funds) should be invested so that the income may be earned outside the risks of the business.

In all cases where the specific purpose is proximate, clearly the time interval does not allow, or demand, investment, and, *per contra*, where the purpose is merely the provision of an increase of circulating capital, investment is definitely negated. Needless to say, surplus funds not required in the business will be invested to secure their profitable use, and even funds temporarily surplus to trading requirement will be invested in temporary fashion. Investment may, however, be limited to a separate bank account on, say, deposit interest terms.

The investment of a company in its own debentures referred to in the last chapter, will not be overlooked in this connection, while the whole problem of investment in relation to sinking funds dealt with in Chapter V bears in measure on the considerations herein treated.

7. **Secret or Hidden Reserves.** A secret reserve may be described as the measure of—

- (a) Overstatement of a liability or specific (i.e. liability) reserve; or
- (b) The understatement of an asset.

Considerations, however, will differ according to the method of creating such reserves. Secret reserves are intended for release sometime, even if only on liquidation or reorganization, but not all secret reserves are capable of secret release. (We do not here deal with the ethics of account keeping, but with the practice and its possibilities. Ethical principles may be better considered following the consideration of the practical possibilities involved.)

We shall, therefore, consider secret reserves in the following classes—

(a) Understatement of capital assets—

- (i) By excess depreciation provisions.
- (ii) By providing notional depreciation, i.e. depreciation against non-replaceable assets.
- (iii) By charging capital expense to revenue.

(b) Understatement of circulating capital—

- (i) By under-valuation of circulating assets, or over-valuation of current liabilities or current reserves.

(ii) By “over-colouring” reserves to import liability figures in excess of real estimates.

8. **Excess Depreciation of Replaceable Assets.** In Chapter IV (paragraph 3) we noted that depreciation represents a revenue accumulation to offset a capital loss which will mature at a future time and then demand withdrawal of money for asset replacement. In Balance Sheet No. 8 we saw the position at the end of the first and at the end of the last year of life of an asset. We assumed in that example that the revenue

provision was in fact related closely to the measure of the ultimate need.

In this section we shall consider the effect of excess annual provisions, i.e. a series of provisions which, if continued in series, would offset the asset before the end of its life.

Supposing similar initial conditions to those of Balance Sheet No. 9, we shall suppose an annual contribution of £650 per annum instead of £500 per annum, and record the position at the end of the ninth year as under. We shall assume that all "free" profits have been paid away as dividends, and that the depreciation total is paralleled by an accumulated bank balance.

BALANCE SHEET No. 16

	End of 1st Year	End of 9th Year		End of 1st Year	End of 9th Year
Capital . . .	£ 5,000	£ 5,000	Fixed Assets, Cost	£	£
Loans . . .	3,000	3,000	£6,000 . . .	5,350	150
			Accumulated Bank		
			Balance . . .	650	5,850
			Circulating Capital . .	2,000	2,000
	£8,000	8,000		£8,000	8,000
Circulating Capital . .	2,000	2,000	Stock . . .	1,000	1,000
Creditors . . .	1,000	1,000	Debtors . . .	1,100	1,100
			Cash . . .	900	900
	£3,000	3,000		£3,000	3,000

In the above balance sheet it will be clear that only £150 remains of the original cost to be covered by the last year's contribution for depreciation, so that, if other conditions are repeated in that year, there will be £450 more profit in the year than in a previous year, and that this represents nine years' accumulation of excess contributions of £50 per annum. Let us assume, however, that a contribution of £650 is made from the revenue of the last year and the asset

is replaced at the figure of the original cost (£6,000), but that either the remaining profit is nil or that it has been fully paid away by way of dividend. Otherwise the facts of the tenth year are assumed to be similar to those of the ninth year.

The comparative positions at the end of the tenth year—

(a) Before replacing the asset; and

(b) After replacing the asset;

are as follows—

BALANCE SHEET No. 17

	(a)	(b)		(a)	(b)
	£	£		£	£
Capital	5,000	5,000	Fixed Assets	nil	
Loans	3,000	3,000	New Fixed Assets		6,000
Excess Depreciation			Cash accumulation	6,500	500
Fund	500	500	Circulating Capital	2,000	2,000
	<u>£8,500</u>	<u>8,500</u>		<u>£8,500</u>	<u>8,500</u>
Circulating Capital	2,000	2,000	Stock	1,000	1,000
Creditors	1,000	1,000	Debtors	1,100	1,100
			Cash	900	900
	<u>£3,000</u>	<u>3,000</u>		<u>£3,000</u>	<u>3,000</u>

It is now clear that the excess depreciation of £500 is a free fund available either—

(a) To offset future depreciation provisions, and thus relieve future burdens against profits; or

(b) To finance further trade as a free reserve.

Now, although in Balance Sheet No. 17 we have disclosed the excess reserve, the potential excess reserve in Balance Sheet No. 16 is not disclosed, so that at the end of the ninth year it includes a measure of secret reserve. Even at the end of the tenth year, if the conditions there had been related to one of a series of assets and not to the whole group, the process of deducting the excessive reserve on an item together with other reserves from the whole group of assets

would have hidden its measure and would continue to do so in future accounts.

Such a reserve is therefore partly a secret reserve, betrayed fully in the example by the cash accumulation, but this betrayal is due to the isolation of the particular course of action and in more complex circumstances would not be so clear.

Excessive depreciation is therefore a means of creating secret reserves because, not merely does it over-estimate present portions of losses, but, so far as it is excessive, it may be used to finance trade or future dividends where later contributions are reduced in compensation. Sometimes these results are arrived at as the major intentions of the annual adjustments.

9. Notional Depreciation and Depreciation of Non-replaceable Assets. Where depreciation is not real in the sense that no ultimate replacement of assets is intended (e.g. in the case of goodwill), we should note that the whole depreciation provision is free money available to finance trade. Thus, in Balance Sheet No. 17 (a) if the sum of £6,500 be not required to pay for a new asset it may be applied to other purposes.

The value paralleled with the "fund" then forms an offset against the capital and loan capital, so that what was once paralleled by intangible assets is now covered by other and, maybe, more material or more realizable assets. Presumably, a business which can so reproduce its capital has maintained its goodwill at least in measure, so that the accumulated provision is a free reserve capable of application as such. Thus, we arrive at the result that to transfer a sum of £1,000 openly to reserve is no different in effect from writing down goodwill (or other non-replaceable capital asset) by a similar amount of £1,000.

Writing down goodwill, however, is wholly a reserve

provision, but cannot be called truly secret, because the measure of each annual or periodic reduction is capable of note, but at any given point the accumulation of deductions from goodwill is reserved profit not usually fully disclosed in one balance sheet taken alone.

The process of writing down goodwill, preliminary expenses, and preliminary advertising, is therefore a process of accumulating reserves out of profits, and even though notions of valuation for sale may be quoted as justifying or even demanding such a process, the reality of the reserves of revenue so created is beyond question.

This statement opens up the larger one as to whether it is a full and frank statement to state non-replaceable capital assets below their cost value in the balance sheet. So far as such value may have been destroyed it is a loss which, if not reserved against, will ultimately fall against capital. If utility is still present it cannot be claimed as any more than a maxim of valuation prudence to demand the writing down of the asset for the balance sheet statement. Whether there be or be not a utility, however, the writing down produces a reserve, albeit otherwise named, and such reserve is available as circulating finance to the business. If there be a probability of loss on the asset, the reserve may ultimately be desirable to offset the loss which otherwise would fall against capital. It is operative reserve, however, until that capital is ranged to bear its losses, i.e. on liquidation or reorganization.

10. **Capital Expenditure Charged to Revenue.** Clearly, capital expenditure charged to revenue is equivalent to writing off 100 per cent depreciation in one year. To write off 100 per cent in one year instead of making provisions over a "life" of years clearly depresses the profits of one year to allow more favourable

expressions of profit in later years. The measure of liberation made available for later years may therefore be a measure of some "book reserve," but apart from this, no reserve is created which will become available otherwise than by sale of the asset itself, when its proceeds may be restored to free profits. Such a contingency must not be looked for apart from considerations affecting the whole or the major part of the capital expenditure. Generally in relation to a whole body of such capital expenditure such a potential reserve will be offset by other factors of loss accruing at the same time.

Expenditure on capital additions is frequently charged to revenue for reasons almost apart from reserve conditions. If such capital expenditure were paid for and profit distributed without adjustment, the measure of such expenditure would be the measure of a draw upon the sums available as circulating capital. We cannot expend £1,000 on a machine and give the same £1,000 away as dividends, so that, if the profits are distributed to the hilt, £1,000 will be taken from the available circulating capital, provided new capital has not been raised. By charging £1,000 capital expenditure to revenue, however, we restrict the computation of profit out of which dividends will be paid, and thus maintain the required measure of circulating capital out of profits. The not infrequent practice of writing off, say, 25 per cent of additional capital expenditure in one year, and a normal but lower rate of depreciation thereafter, becomes now intelligible as a process of conserving the circulating capital in part, if not wholly.

A further process of accounting adjustment which may now be made more intelligible is that of "spending on extensions and renewals each year a sum tending to

equal the amount written off for annual depreciation." We saw in Chapter IV that depreciation provisions conserve liquid resources against dividend demands, whilst we now note that incurring capital expenditure, without introducing further capital, has the precisely opposite effect. If the two processes are balanced out it is clear that the normal circulating capital conditions are maintained.

The point has peculiar application to certain types of business where there is constant renewal of assets. An extreme example will serve best as an illustration.

Suppose a circulating library to have an initial stock of books which cost £1,000. Depreciation of books cannot be calculated as may that of machines or other assets. Some have a short utility life, some longer. Physical conditions may operate, but other conditions certainly will, in some cases, determine lives as shorter than the physical lives.

It is thought in such a case that the process of writing off a percentage depreciation and capitalizing purchases does not measure the financial facts. Assuming the total capital value is maintained, the real application of revenue equals the cost of new purchases made to maintain the base value. Positive additions to base value may be capital expenditure, whilst contraction of base value may involve a loss of capital (which may be offset by adjusting profits), but mere fluctuation of "offs" and "ons" becomes merely a problem of equalization of revenue charges over a series of years. The best treatment in such cases is clearly to contribute annually a series of contributions to a renewals fund and to charge purchases, as incurred, against such fund, maintaining the main library account at a standard valuation, subject only to increase (or decrease) relating to more permanent growth (or

contraction) from base value. The example of a library is taken so as to exclude the possible modifications due to other surrounding factors which might be found in a business having a variety of assets. The principle enunciated is, however, peculiarly suited to the consideration of loose tools, minor furnishings, and indeed all short life assets of movable and variable type.

II. **Understatement of Circulating Capital.** We have seen in Chapter I that profits and the circulating capital together are governed in their computation by the measure of the circulating assets and liabilities. Profit, primarily, is an accretion of potential circulating capital, and, so far as the circulating capital conditions so require, a profit cannot be considered as free for distribution until the full measure of circulating capital has been made good. We have seen further that an increase of credit gives an additional circulation power to the circulating capital.

Profit (then) is subject to a real statement of the circulating assets and liabilities. Let us suppose, therefore, that a statement of profit is not frankly made, and we shall suppose in Balance Sheet No. 18 the following misstatements—

(a) Stock is undervalued by £60.

(b) Book debts are undervalued (or bad debts reserve overstated) by £40.

(c) Creditors and specific reserves are overstated by £50,

so that in column (a) in Balance Sheet No. 18 we have a true valuation, and in column (b) an understated valuation of the position of the circulating assets and liabilities.

Position (a) is *ex hypothesi* real, so that the profit is actually £300. For reasons of policy it may be

BALANCE SHEET No. 18

	(a)	(b)		(a)	(b)
	£	£		£	£
Contributed Circulating Capital	1,000	1,000	Stock	1,000	940
Creditors and Specific Reserves	600	650	Debts less Bad Debts Reserve	700	660
Profits	300	150	Cash	200	200
	<u>£1,900</u>	<u>1,800</u>		<u>£1,900</u>	<u>1,800</u>

undesirable to show such a profit as it may create a desire for a corresponding dividend.

Position (b) is produced therefore to reduce the profit by mere book-keeping entries to show a profit which the management considers good to base the dividend demand.

Clearly a demand for cash dividend of £300 (position (a)) is reduced to one of £150 (position (b)) so that £150 cash is retained for re-circulation. Thus, supposing the dividend of £150 is paid we have a circulating capital as follows—

	<i>Recorded</i>	<i>Actual</i>
	£	£
Stock	940	1,000
Debtors	660	700
Cash (after dividend is paid)	50	50
	<u>1,650</u>	<u>1,750</u>
Creditors	650	600
	<u>£1,000</u>	<u>£1,150</u>

The circulating capital provided is recorded as £1,000, but is of real value amounting to £1,150, i.e. the difference is the amount of the hidden reserves. Note that the same result could have been obtained by entering the full or real value of assets and liabilities, but adding a specific liability of £150 to the liabilities side, under the heading of taxation reserve or some other title suggestive of cover against liability, i.e.

over-colouring reserves to suggest liabilities and thus limiting the expression of the real profit.

Secret reserves of this order may be noted as releasing themselves to swell the following accounts of profit either automatically, by falling into the continuous nominal accounts, or ultimately, if the annual adjustments are continued. It is therefore a feature of such reserves that they may be released secretly to conceal the measure of loss, or of reduced profit, of a later year. Recent cases have brought the use of secret reserves into a peculiar prominence in so far as their release may not be disclosed in published accounts, and the present tendency is to indicate in the directors' or audit report presented with the accounts that secret, hidden, or internal reserves have been used to meet some courses of loss or expenditure. We shall not here deal with the ethical aspect of secret reserves, noting only those methods which are applied and in relation to which ethical consideration might be given. We shall note that some principles of valuation of circulating capital may be applied so that the measure of some forms of secret reserve may in fact not be recorded, even internally, e.g. by valuation of stock on a "conservative basis" of valuation but below its "true" valuation.

Whatever view may be adopted as to the creation of secret reserves, there is at least the commendable middle course of recording the reserves in some accounts and recording real valuations even if the created reserve be hidden in the published balance sheets by concealed deduction from the assets (then expressed at net figures), or by inclusion among the liabilities. Managements need not deceive themselves even if they judge it necessary to restrict their shareholders' information.

CHAPTER VII

CAPITAL PROFITS AND LOSSES

ARGUMENT. *Some profits may be real but impressed with conditions forbidding their distribution as dividends.*

1. **Capital Appreciation.** The increase in value of any asset, whatever be the test of its measure, is, of course, a profit within the dictionary sense of that term, but in accounting practice such an increase in computed value cannot be included as a distributable profit until the liquidation of such profit is assured by a contract for sale or by actual sale. Accounting valuations therefore never exceed cost values unless the excess be carried to some form of reserve to negative an intention to distribute its measure in dividends.

Appreciation calculations, however, which are merely in counter to previous depreciation estimates are, of course, a return to account of notional and unrealized depreciation, and subject to the financial position (see Chapter II, etc.), and of course to fair statement of accounts, such "depreciation written back" may be considered as a profit fund.

Sometimes actual appreciation in value (such as growth of goodwill or increase in site value) is referred to as a secret reserve, but it should be noted that such reserves depend upon realization, not only for their positive proof but also for their availability for any purpose.

This principle of suspending the computation of a valuation profit is equally true of fixed assets and circulating assets, even though the enhanced value of circulating assets may in fact accrue by realization,

or be expected to do so, within a relatively short period.

So far as any special circumstances may justify a revision of capital values for reconstruction purposes, further capital issues, etc., any profit not offset by similar losses should be carried to a capital reserve, though they may in proper cases be the subject of a bonus distribution of shares, i.e. capitalized in the form of further share capital.

2. **Profit on Sale of Capital Assets.** Where a capital asset separately purchased is ultimately sold at a profit it may be noted that the profit is (a) real, (b) assured, and (c) ultimately received in liquid form, so that it then attaches itself to the circulating fund. Thus, in Balance Sheet No. 19 we give the position (1) before realization, and (2) after realization of one of the fixed assets.

BALANCE SHEET No. 19

	1 Before Realiza- tion of one Asset	2 After such Realiza- tion		1 Before Realiza- tion of one Asset	2 After such Realiza- tion
Capital	£ 5,000	£ 5,000	Fixed Assets at Cost .	£ 4,000	£ 4,000
Loans	2,000	2,000	Fixed Asset (sold in		
Profit on Sale of Capital Asset		200	2) at Cost	1,000	1,200
			Cash for Asset sold . .	2,000	2,000
			Circulating Capital . .		
	£7,000	7,200		£7,000	7,200
Circulating Capital	2,000	2,000	Sundry Circulating Assets less Circulating Liabilities .	2,000	2,000
	£2,000	2,000		£2,000	2,000

It is quite clear that the cash item £1,200 appears available as additional circulating capital. £1,000 of this is of course part of the contributed capital and is clearly not profit. The sum of £200 is however

“free” and in a book-keeping sense is available for dividends.

The company's own regulations may prevent the distribution of such profit as dividends, and of course in such a case the regulations must be followed and the profit reserved. Had at least £200 been previously written off such asset for depreciation it would of course be quite permissible to “return to profits” the amount of “unrealized depreciation.”

Apart from those principles, accounting notions consider such a profit a capital profit which should be held in reserve or, at least, applied to reduce another asset valuation which would not be required by the company's regulations to be reduced out of revenue. The problem is, of course, modified if another asset be purchased to replace that sold, as the usual accounting practice would be to set the profit of the original asset against the cost of the new asset to record the latter at a reduced cost. (An entirely academic point may then be considered as whether the depreciation calculation in such a case would be on the basis of the “gross cost” or “net cost” of such asset, and, as in most cases, the net cost basis would be accepted, we note a peculiar emphasis of the accounting consideration of depreciation, as not being necessarily related simply to replacement facts.)

3. Losses on Valuation of Assets. Losses computed by re-valuation of assets do not follow so dogmatic a routine of treatment as their correlated profits. Separate consideration must be given to losses on (a) circulating assets, and (b) fixed assets.

It may be said generally that losses on circulating assets should be treated as losses falling against profits or reserves of profits, because they represent an immediate loss of circulation power (see Chapters I and II) whereas

the increased circulation power of appreciated circulating assets does not accrue until realization is assured.

This necessity for charging such losses against profits or reserves, however, may be limited in practice by notions which, subject to prudential considerations, may fairly be allowed application. Thus we have seen that some forms of expenditure may be suspended for charge as burdens in later accounts (see Chapter II). Under equation with this notion a revenue loss on valuation may similarly be suspended, and a particular example is found in the case of stores bought in one period for a purpose to be fulfilled or completed in a later period. Here the "cost value" of such stores, notwithstanding the lower test of "replacement value," may be carried over for charge as they are used. Theoretically, it may be inferred that such a carry-over is only strictly permissible where the subsequent use is against a return already measured or determinable, and not against adjustable earning conditions, and this point is noted as one defining one of the prudential considerations which may be applied. It is, however, noted that a depreciation of value which is thought to be temporary only, i.e. likely to be recovered within the period of probable user, might be ignored for balance sheet purposes, again subject to prudential considerations. The general rule for valuation of circulating assets is "cost price or replacement price, whichever is lower," though the rule is more indicative than rigid, except to the extent that cost price may not be exceeded whatever the replacement value may be.

Similar losses on valuation of capital assets raise many more considerations, which may only be dealt with in sequence to other matters considered in this chapter.

4. Profit (or Loss) on Sale of Assets Forming a

“Parcel.” Where a price is paid for a parcel of assets the cost value in general attaches to the parcel, so that calculated profits, even if calculated following realization must be fairly considered in relation to the whole computation of the parcel.

If all the assets are fixed in nature, it may be stated generally that the profit on any part sale should be kept as a reserve pending realization of the remainder.

The legal cases bearing upon this issue are: *Lubbock v. The British Bank of South America, Limited*, 1892, and *Foster v. The New Trinidad Asphalt Company, Limited*, 1901, in which it was defined that such profits were capital profits, but may be distributable if the company regulations so allowed and proper valuations of the remainder were made.

The right to depend upon a proper valuation gives a *legal* discretion, which may in some cases be properly depended upon, particularly where the unsold proportion of the assets will not in fact be sold by the company whilst a going concern. Strict accounting notions, however, consider such a profit to be a subject for permanent reserve, at least until some special form of distribution is possible in the form of bonuses, or return of capital in excess of requirements.

If some of the assets in the parcel be circulating assets, i.e. assets which will be realized in course of ordinary dealing, some complexity is added to the problem. The computed cost of the portion representing circulating assets must be fairly made. We shall consider separately (a) stock and (b) book debts as representative of two different types—

(a) Stock taken over and handled in the ordinary course of trade will in the purchase contract be separately stated for stamp duty purposes and generally its true value be so fixed. It must be clearly indicated,

however, that any conditions making the stock value so marked a bargain price will release a "bargain profit" to the account of the period of its realization, and if such bargain would not be obtainable except as part of a contract for a whole parcel, some measure of the profit attaches to the other elements of the parcel and should be reserved accordingly. Stock taken over for handling in a manner not being in the ordinary course of trade, e.g. lines not proper to the purchasing business, should not be charged to the trading account proper, so that any book profit on sale (after charging expenses attaching to realization) should be considered as a profit arising out of capital conditions and reserved against the value attached to the remainder of the parcel.

(b) Book debts taken over subject to a bad debts or discount reserve will generally leave after realization a profit or loss on such reserves. It is not improper to charge against any such profits the expenses (even including interest) attaching to the asset pending realization, but any final profit is undoubtedly a capital profit to be set against the remainder of the parcel. A loss similarly is a capital loss which might quite properly be considered as an addition to the cost of the remainder of the parcel and is quite properly added to any "paper element" included therein, such as goodwill. Prudential reasoning, however, frequently results in such a loss being charged as a loss to the revenue account, and so far as any measure of such loss may be due to management since its purchase, such a course might be thought to be demanded.

We conclude the paragraph by a reference to assets which though fixed in their nature (e.g. machinery) are bought mainly as a condition of obtaining some of the other assets, the part not required being sold for what it may fetch. Any book profit or loss on such

is of course a resultant adjustment of "cost" of the articles purchased for retention.

5. **Capital Expense Considered as "Assets."** We have hitherto considered capital assets as so many created things or rights having separate identity within a business equipment. It is, of course, simple to consider each asset apart from the whole in relation to problems of replacement and other factors bearing on each apart from the whole assembly. Problems of value are, however, concerned, not merely with this separateness of consideration, but also with the relationship of the parts to the whole. A mere collocation of assets does not of itself produce a capital potentiality, just as a mass of bricks need not necessarily constitute a building. The surrounding conditions producing the collocations and the purpose of the acquisition bear also upon notions of value and even of cost.

Some forms of expenses, therefore, which may have been incurred merely incidentally in the process of capital equipment or creation are considered a part of the cost of the earning power to which the assets contribute. Such expenses may be either (*a*) directly concerned with a particular asset or (*b*) concerned with the whole earning power of the business or a part of it.

The expenses incurred incidentally to the acquisition of any particular asset are therefore treated as further elements of cost of such assets and accounting treatment may even conceal their particular nature by entering them in the account of the associated asset. Thus, legal and professional charges incurred as part of the cost of acquiring a building, a trade mark, a goodwill or a machine, would be quite properly entered in the account of the building, trade mark, goodwill, or machine. It might be thought that this follows

merely upon the notion that a replacement cost will involve a duplication of the expenses, and though such a reason, where it be found, would justify the proposition, the real reason lies in the fact that the "cost" involved the additional cost in fact, whether or not a repetition purchase would involve a repeated addition to cost. The criterion is the "cost of acquisition," and this includes all the costs necessary to acquire the asset.

Expense, however, may not be so clearly associated with any particular asset separately and may be wholly or partly associated with the business entity, legal or physical, or with its potentiality, however computed or measured. Thus the expense of forming the company, of issuing its capital, of investigating the goodwill of any purchased business, of preliminary organization, of working the business pending the date of its full equipment, of advertising to create (but not merely to maintain) a market; all these are capable of consideration as capital costs, i.e. as assets, which may be described under specific headings or under group headings not disclosing their particular nature. Prudential principles of valuation may operate to reduce the balance sheet value of such assets below cost, or even to a zero expression ultimately, but we have seen (Chapter VI) that such a process restores out of profits the capital so invested for use as circulating capital.

Specific problems of some nicety may arise in the application of the above rule, and a few extreme examples are quoted to emphasize the point made.

(a) A compensation claim paid in respect of an accident to a workman engaged in opening up a mine might be charged to the Mine Development Account. (Note that the criterion is a mere association in fact

with the mine development and not the possibility of repetition nor any consideration of normality.)

(b) During the opening of a mine a gravel pit is discovered and gravel is collected for sale. Temporary grazing is available for cattle during actual operations. Advertising hoardings are let during construction. The profit on such incidentals are profits incidental to the main operation, and correct accounting treatment considers the profits as a reduction of actual cost of the main operation, so capitalizing the sectional profits. Suppose, however, in the case of the gravel pit a loss were incurred in the subsidiary work, it would not be improper to capitalize such loss as part of the cost of development, although it may be that the loss represents the result of an unfortunate decision to work the side issue with the intention of profit making. Prudential considerations of course may result in such a loss being charged against profits, particularly during the period when there are profits available to cover them or such are thought to be proximate, but this represents the excess case of the prudential maxim in substitution for a pure accounting principle.

Capital expenditure is therefore not measured merely by creation facts, but may be merely the cost of "capital intentions." Thus an unsuitable machine erected, dismantled, and replaced by a suitable machine will still represent capital expenditure, as also will experimentation costs pending, or as a preliminary to, actual creation expenses.

6. Abandoned Capital Expenditure. The consideration in the last paragraph leads the way to a correct view of capital sunk and lost, i.e. no longer represented by earning power, when there are other continuing or new conditions of earning available. Concrete examples may be selected for illustration.

(a) Substitution of new means of operations, e.g. abandonment of car lines and tramway traction on the introduction of motor buses.

(b) Loss of service value, e.g. abandoned protection banks where a water course is redirected.

(c) Failure of an economic source of supply when a purchasing service becomes more profitably available. (But see the case referred to in Chapter IV.)

The above are all clear examples of capital sunk and lost and both legal and accounting views concede that current earnings may be distributed as profits without reduction in respect of the lost capital.

It may be, of course, that the measure of current profits may be such that the reality of the capital loss should be faced, and in such cases application to court for leave to reduce capital by the amount of the loss might be made. Prudential notions may also result in directors writing off such capital losses "over a period of years," but the accounting principle that the capital loss may remain capitalized is not negatived by these courses, which are dictated by matters and measures related to the facts of the business as a whole. It is, of course, a mere ordinary book transfer to set such capital losses against any funded profit appearing on the liabilities side of the balance sheet, such as reserves, redeemed debentures, capital reserve, and so on, excluding only capital redemption reserve funds created on the redemption of preference shares (see Chapter V).

It is proper now to note that cost is the first and primary measure of the statement of a capital asset in a balance sheet, whilst *valuation* is a specific corrective applied under conditions which bear on other considerations not at present under review (see Chapter IX).

7. **Improvement in Lieu of Replacement.** Where an existing asset is replaced by an asset of greater capacity and cost there is a loss in respect of the original expenditure involved, or, expressed otherwise, we may say that the new expenditure has provided advantages in measure similar to those previously enjoyed *plus* additional advantages. The additional advantages alone represent the capital effect of the new expenditure, and hence a problem of apportionment of the new expenses arises.

Two distinct methods may be recognized in practice—

(a) To write off as lost the old capital expenditure and to capitalize the whole of the new expenditure; or

(b) To calculate that part of the new expenditure which merely covers the measure of replacement of the old, and to charge that portion as lost; so that the capital expenditure account is finally adjusted to include (i) the old expenditure plus (ii) the part of the new expenditure calculated to the additional element.

These two methods will be recognized as resulting in different figures if it be remembered that the original design may not cost at the time of the new works exactly the same as it did on the occasion of the original acquisition.

Method (a) is the general method, particularly where capital expenditure has been subjected in accounts to depreciation deduction. Method (b) is said to be applicable to those public undertakings adopting the double account system, under which it is not customary to deduct depreciation from asset values.

The reason for this difference of practice is clearly not merely an accounting one, but method (b) is thought to be the more consistent with the legal principles governing the accounts of the type of undertaking to which it applies. Accounting considerations may also

be pleaded to support this differentiation of practice. Public undertakings are permanent in character, so that once created they have attached to them a created value which represents a finality of cost of its type. Replacements with improvements add to cost in measure of the improvement, and any repeated cost should be provided out of revenues set aside therefore. No valuation concept arises in such a case. A commercial undertaking can take new views of value at any period of its history, and a new set of conditions involving a then cost of the creation is capable of adoption as a concept of value of the new type, while the old type can be considered as passed out of value altogether.

8. Capital Receipts. Some receipts by a company may be profits and be liquidated so that they are profits in the fullest sense, but they may also be impressed with legal or other characteristics, which, whilst not altering their profit character, at least forbid their distribution as revenue profits earned. The legal restriction on distribution may not in every case be a positive prohibition, but the accounting interpretation is in all the undermentioned cases very positive as a prohibition of distribution as dividends. Examples are—

(a) **PREMIUMS ON SHARES.** These are ordinarily capable of receipt only where the goodwill or profit ratio of the company is of distinct value. The premium represents an added consideration paid by the share applicants so as to share in the produce of such goodwill. Such premiums may not be required by law (other than the company's own regulations) to be excluded from profit for distribution, but accounting practice looks upon such receipts as a recovery from the public of the cost of goodwill purchased or created, so that accountants will either—

(i) Capitalize them permanently in the balance sheet; or,

(ii) Use them in reduction of goodwill, or other accounts of "created goodwill," such as capital advertising and the like; or

(iii) Use them as part of a sinking fund to provide for repayment of capital loans or to reduce wasting capital, where these burdens are not required to be met out of profits.

(b) PREMIUM ON DEBENTURES. Whilst this type of receipt is somewhat analogous to premium on shares, the probable origin of this premium is the fact that a rate of annual interest is contracted for over a series of years and is thought to represent a higher rate from year to year that the particular company would expect to pay if it borrowed annually, rather than to borrow at one time with consequences over a period. It is not illogical therefore to use such premiums to relieve the interest charges over the term. Such an action (though it might be defended subject to surrounding financial conditions), is not general, but nevertheless the premium might form a sinking fund to relieve profits of part of the burden of redemption. The continued availability of the fund received is, of course, a material consideration, and thus permanent or long period reserve of such profits may, and probably in the general case will, be enforced.

(c) MONEY RECEIVED ON FORFEITED SHARES. This is money received and, so far as not applied to meet any discount on re-issue of the shares, is a profit of capital operation; a windfall arising out of capital and not out of earning conditions. Accounting principles demand, even if legal implications do not, the maintenance of such profits for use in their own class of transactions, i.e. for permanent reserve, or at least for the

reduction of some expense associated with the same or similar capital condition, e.g. formation or preliminary expenses, acquired goodwill, etc.

(d) PURCHASED PROFITS. Companies cannot earn profit before they are entitled to commence business, and where a business is purchased "as from an anterior date" any profit between such date and the date the company is legally entitled to earn profits is a capital acquisition and not profits so earned that they may be distributed as dividends. The total purchase price may be formed on the basis of an anterior statement of value, but when acquired the profit accrued (or loss) is a purchased factor and is not of earned character, and such profit (or loss) should be capitalized, preferably by set off against (or addition of a loss to) purchased goodwill. Prudential reasoning may refuse to add loss to purchased goodwill, but apart from rules of prudence this may be done in accordance with correct principle.

This principle is not limited to purchase on incorporation, but applies equally to any "acquisition profits accruing" together with the capital asset, so that the profit when received is in reduction of the capital cost of the basic assets. Thus, any business taken over "as from an anterior date" will involve this capitalization of profit accumulated to the date of acquisition. A simpler case is found in the purchase of an investment *cum dividend*, so that the part of the dividend accruing before the purchase is purchased out of capital moneys, and when that portion is received it is a recovery of so much capital money.

(e) COMPENSATION MONEYS received for loss of rights or earning power. These are clearly the offset against capital abandonment and should be capitalized. Even though the capital powers abandoned may not have been acquired at capital expense or may have arisen

from the natural outgrowth of some capital power which has been so acquired, it is thought that accounting procedure at least demands their capitalization.

(f) INSURANCE CLAIMS RECEIVED AND NOT EXPENDED IN REPLACEMENT. These are clearly similar to compensation moneys.

(g) PROFIT ON REDEMPTION OF DEBT AT A DISCOUNT. Interim redemption of debt may be experienced and even sought to save part of the ultimate cost of redemption or avoid investment meanwhile. Any discount saving may, of course, be released to profits over a series of years by readjustment of the annual sinking fund contributions, but clearly such profit should be held for association with all the factors relating to the provision for debt redemption including the realization of sinking fund investments. This is, substantially, a temporary capitalization.

(h) BONUS SHARES RECEIVED ON INVESTMENTS. These items will not normally come into the account unless realized, and even then accounting treatment requires them to be considered as a reduction of the figure of capital investment. If a profit remains in the ultimate final realization of the investment a part of it is free profit (subject to other financial considerations) unless the conditions already considered relating to capital association or parcel conditions arise. *Ad interim*, however, such profits are considered capital profits, and so far as they are "free" they are usually added to general reserves.

All the matters dealt with in this paragraph may, however, be the proper subject for a bonus distribution to shareholders in the form of shares. This, however, is only a particular process of capitalizing such profits.

CHAPTER VIII

READING THE BALANCE SHEET OF A GOING CONCERN

ARGUMENT. *The elements of a Balance Sheet contribute to a position stated as a whole, but incidents apart from final liquidation involve interim demands, so that a review of the circulating capital needs and of the manner of providing for such needs is a dominating factor when considering the measure of profitable operation.*

1. **Angles of View.** Balance sheets are examined by persons who may vary considerably in the relative emphasis which they attach to the various points of interest. A prospective debenture holder emphasizes the value of his security, viewing its possible realization at any time, but takes a somewhat limited view of profit-earning power, so long as his interest appears to be well covered. A prospective preference shareholder is somewhat similarly concerned, his emphasis on profit power being somewhat more definite and his interest in the capital value being modified according to the terms of preference attaching to the capital on liquidation. A prospective ordinary shareholder is more remotely concerned with asset values but is primarily concerned with profit power and the effectiveness of the circulating capital. Bankers, creditors, guarantors, and others will vary their emphasis according to their several interests. The dominant note of difference of point of view is therefore designed to emphasize either (a) asset value as security; or (b) effective circulation finance as a measure of earning power.

When asset value as a measure of security is the

view taken, the analysis of a balance sheet is concerned with—

- (a) A statement of asset values.
- (b) A statement of prior charges thereon and deductible from such total asset value.
- (c) A calculation of the remainder of asset value as cover for later interests in order of their rights.

The method of examining balance sheets from this angle of view is treated in *Balance Sheets*, by Philip Tovey, F.C.I.S. (Pitman), and is therefore only referred to here. Where, however, the view sought is one affecting the circulating finance, profit earning and reserve capacity, another method of analysis must be considered. It may be noted, however, that any analysis from this angle of view must be supported by a comparative statement of profit and loss accounts covering a series of representative years.

Statements of profit and loss, as we have seen, are dependent upon balance sheet facts and representations, whilst the measure of profit which is distributable is principally dependent upon balance sheet quantities. The balance sheet must therefore be viewed as a moving whole, and the factors which have temporary capacity to move in circulation must be noted separately from those of continuous operation. The various time limitations of the limited factors are as important as their volumes, and analysis must, therefore, have regard to the separation of matters of varying availability in point of time.

2. **The Limitation of Analysis.** Published balance sheets are usually summarized in form and condensed in detail and thus lead to restricted analysis only. If only published balance sheets be available, they may be annotated by reference to the earlier balance sheets and directors' reports, whilst deductions and assumptions

will be brought into the notes at the proper discretion of the examiner. It may not always be possible to commence the analysis with reference back to the commencement of the business. We may, however, go back as far as seems possible and profitable.

Internal adjustments, such as capital expenditure charged to revenue, will not ordinarily be disclosed by balance sheet reading, though the comparative statements of profit and loss factors may lead to a view that such adjustments are involved in the figure under the repair and renewals headings.

The adequacy of depreciation provisions will not be fully capable of establishment, particularly against a total of mixed assets, but the positive measure of the provisions against the total asset values by reference to the time during which the provision was made will at least afford a view whether depreciation has been provided in a measure apparently generous or, maybe, niggard.

Real value (i.e. for realization) is, of course, not capable of ascertainment from analysis, but, apart from the consideration of depreciation measure available, there is some measure of utility value obtained by comparing the sum total of the business capital with the rate of annual profit earning power. Realization value is, of course, not a test of value except for a purpose involving realization, and the fixed assets have as a total expression a measure of user value in ratio to their earning power.

Our analysis will tend to show a position that is partly quantitative and partly qualitative in expression. Views and estimates of possibilities rather than positive information may flow from it. At least a basis of inquiry as to detail is established if inquiry may be prosecuted.

3. **The Main Method of Analysis.** A two-part method of balance sheet presentation has been referred to in Chapter I,⁵ and our present method is but an extension of this division into three parts, viz.—

Part A. The capital moneys raised and set against the capital expenditure to find the part of circulating capital provided from primary sources.

Part B. The trading capital section showing the trading capital and credit actually employed.

Part C. The reconciliation section showing how the trading capital in Part B has been provided from the capital in Part A, and the other finances since accumulated. This section involves some analysis so as to separate quantities subject to time operation from those of continuous operation.

The principles of division may not be rigid in character, and frequently such items as "Sundry Creditors" and "Expenses in Advance" will conceal elements which a full analysis should separate for entry in different parts. Over-riding tests of such figures by calculation of yearly proportions to turnover will, however, tend to locate any unusual measure included under these heads.

4. **A Condensed Balance Sheet.** We now view a balance sheet (see page 107) in common summary form, omitting, however, the year's variations and the statements as to how values have been arrived at. Each item is numbered for the convenient association therewith of the further information (or deductions) available from earlier balance sheets, reports, etc.

5. **Further Notes.** From the various sources indicated or reasonable assumptions based thereon, the following notes are supplied—

Item (2). Debentures redeemable in 20 years of which two years unexpired, involving a sinking fund of, say, one-tenth = £3,000.

BALANCE SHEET OF A COMPANY

<i>Capital and Liabilities</i>		<i>Assets</i>	
	£		£
Registered Capital— 80,000 £1 shares .	80,000	(7) Land and Build- ings . .	45,000
(1) Issued Capital— 80,000 £1 shares fully paid . .	80,000	(8) Leaseholds . .	7,000
(2) Mortgage Deben- tures . .	30,000	(9) Fixed Plant . .	15,500
(3) Trade and Current Creditors . .	3,000	(10) Loose Plant and Tools . .	500
(4) Bills Payable . .	2,500	(11) Goodwill . .	30,000
(5) Reserve Account . .	6,000	(12) Stock and Work in Progress . .	12,500
(6) Profits available . .	6,000	(13) Debtors . .	8,500
		(14) Investments . .	6,000
		(15) Bank and Cash . .	2,500
	<u>£127,500</u>		<u>£127,500</u>

Items (3) and (4). Creditors' balances considered to be current balances as they appear to be of normal volume in relation to the trade done. Any expense reserves for future application should be separated.

Items (5). Reserve fund is thought from inspection to be of mixed application, as no specific reserve is available to cover sinking fund, dilapidations, extensions, and contingencies.

Item (6). Profits are subject to a dividend recommended at 3 per cent on the capital.

Item (7). Land and buildings cost £45,000. Extension (estimated to cost £1,000) contracted for.

Item (8). Leaseholds cost £10,000, the term being 20 years, of which six are expired. Six years' depreciation has to be written off at £500 per annum. Dilapidations expected are estimated at £1,000 involving a gradual accumulation now estimated at $\frac{6}{20}$ ths of £1,000 = £300.

Item (9). Fixed plant cost in aggregate £22,000. Depreciation regularly charged against profits.

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Item (10). Loose plants and tools cost £750. Stock of loose plant and tools presumably maintained out of revenue, but £250 has been written off in depreciation to date so as to bring the asset to a low standard valuation of £500.

Item (11). Goodwill represents the cost of acquiring the connexion of an absorbed business.

Item (12). Stock stated at cost or market price.

Item (13). Debtors—book value £9,000. Includes a debt long overdue of £600 and subject to moratorium conditions. Bad debts reserve deducted, £500.

Item (14). Investment cost £6,000. Present value £5,500. Any contingent loss considered as covered by the reserve account.

6. Stating the Fixed Capital Section—

(a) Fixed assets are inserted at their cost (or earliest record) value and the deductions for depreciation entered in Section C. Any sales are deducted from cost so far as actually realized.

(b) Any fixed loans repaid would be entered in this

PART A—FIXED CAPITAL

	£		£
Share Capital raised .	80,000	Land and Buildings	
Debentures raised .	30,000	at cost	45,000
Fixed Liabilities re-		Leaseholds at cost .	10,000
deemed	nil	Fixed Plant at cost	
Other Capital receipts	nil	(less cost of parts	
Profit on Sales of		sold)	22,000
Capital assets . . .	nil	Loose Plant at cost of	
		full stock	750
		Goodwill at cost . .	30,000
			107,750
		Balance, being contri-	
		buted working capital	
		carried to Part C . .	2,250
	£110,000		£110,000

section as capital reserve, and the reserve fund correspondingly reduced.

(c) Premiums on share issues, forfeited share receipt and other capital profits (see Chapter VII) should be entered here.

(d) Lost or abandoned capital expenditure should similarly be entered and a contra entry made similar to that of depreciation total. Any profit on sales of capital assets should be entered on the liabilities side also, restoring the deduction from the assets if credited there against, or reducing the reserve fund if credited thereto directly or by way of the profit and loss account.

7. **Stating the Trade Capital Section.** Floating assets and current liabilities are intended to be entered in this section, and if the information is available the full values of circulating assets should be entered, any valuation reserve being entered in Part C. Any non-normal liabilities or other specific credit provisions are best separated within the section. Similarly any assets delayed in circulation should be separated from normal items.

PART B—TRADING CAPITAL SECTION

	£		£
Sundry Creditors—		Stock and Work in	
Current £..... } .	3,000	Progress	12,500
Special £..... } .		Expenses in Advance—	
Bills Payable	2,500	Debtors in full:	
		Current £8,400	
	5,500	Overdue 600	
			9,000
Balance, being circu-		Bills receivable . .	nil
lating capital actu-			
ally employed car-	16,000		
ried to Section C . .			
	£21,500		£21,500

8. **Stating the Capital Reconciliation Section—**

(a) The balances of the earlier parts are now brought

into reconciliation with the other factors, accumulated funds, etc.

(b) Any special demands on such funds are displayed. (Note, slow debt and alterations contracted for.)

(c) The special grouping of temporary funds and of permanent provisions should be noted.

(d) Immediate but non-replaceable liabilities (e.g. dividends due) are shown as a deduction from cash balances.

9. Consideration of the Classification in Part C—

I. Certain funding demands totalling to £5,400 are now earmarked as part of the reserve fund and specifically offset against the balance of investments and cash. Similarly the accumulated depreciation provisions are grouped with these funds and also any reserves to cover future cash outlays. A knowledge of the time element of each of these items is essential for a full consideration, as they will not all mature simultaneously against the liquid resources of investments and cash. The *maximum* demand, however, is noted as £14,900 against £6,100 of available resources, so that £8,800 is temporarily invested in the business.

Note will be taken that depreciation provisions against a real replacement necessity are placed in this group, but that similar provisions where no replacement will arise are grouped with the continuous funds. In the case of loose tools it is assumed that the book value (£500) is an arbitrary reduction of the full stock cost of £750.

II. The continuous funds include bad debts reserve, any profit in suspense and any secret reserves which can be unmasked.

A rigid line of demarcation may not be drawn and views will arise as to proper classification. For example,

the slow debt provision set against the reserve balance might be grouped with the continuous funds, the differentiation being based upon a bias of notion or emphasis merely. Again, funds operate in mutual support through their several periods, and as the time factors may not be shown the measure of this support may not be noted except on general lines.

10. **Description of the Finance Employed.** It is clear from statement B that £16,000 is employed in trade over and above credit available. The continuous funds available to support this employment amount to £7,200 only, so that the apparent overtrading of £8,800 has been met by borrowing from temporary funds.

The temporary funds amount to £14,900, of which £6,100 is invested or available, leaving £8,800 not invested or available, but, as already shown, sunk in the trading conditions.

Assuming that similar analysis is available for successive balance sheets, any unusual factors will be brought out and a more complete view of the effect of time conditions and a separation of casual elements will be possible.

Again, if interim balance sheets be similarly analysed, the effect of seasonal demands or applications will be noted.

In general, the analysis of balance sheets on these lines makes more available than any summary statement a view of the business as a going concern. In the hands of those whose business it is to keep the business moving as a going concern, the financial wheels on which it may move may be the most readily viewed and gauged, not merely as to capacity but as to time revolutions. No hypothetical case with limited hypothesis may produce a fully reasoned criticism, but

if hypothesis can be replaced by known facts and a knowledge of inner workings, we have set forth a method of analysis which may lead to interpretation in terms of finance, measuring the reality of capital and the extent of profit earning capacity.

CHAPTER IX

A REVIEW OF BALANCE SHEET VALUATIONS

ARGUMENT. *Balance Sheets are not primarily statements of valuations, and the quantities set against the items are mainly the arithmetic result of adjusting profit calculations by setting reserves against costs.*

I. Cost the Basis of the Initial Record. Capital is spent on things, circumstances, and processes. Each spending produces a debit entry in an account, and the primary purpose of the entry is to record the amount of capital (including circulation finance) applied. These debit entries are therefore in measure of costs. At the date of each balance sheet an analysis of such costs is necessary. Some costs have passed out of utility and have been consumed or lost, or at least passed into a process of conversion from which other wealth has been reaped and is recorded elsewhere at the value of its capital equation. These "lost" costs form the charges against revenues, the debits to profit and loss accounts, and do not appear in the balance sheet.

On the other hand some costs are not quite lost and have further utility attaching to them. Costs resulting in utilities are assets, and the record of the cost is therefore the first quantitative record of the asset.

The utilities so acquired are of two kinds, and before considering any quantitative expression of those utilities we must note the governing consideration of the classification of those utilities.

Some utilities are those of a single use, i.e. a capacity to be applied in process or subjected to conversion to another form of wealth in the cycle of production.

These utilities are circulating assets described in Chapters I and II.

Other utilities are those of repeated use or of repeated potential user, and are thus fixed assets described in Chapters I and IV.

The factor of utility, capacity, or use is clearly the basis of quantitative expression of both of these types of assets, but the measurement of such utilities is a problem of complexity operating differently in relation to the two types, and thus involves separate treatment.

2. **Measuring the Utility of Circulating Assets.** The utility of circulating assets has a limit of value in that the single use to which they may be put is in immediate association with produce in a course leading to realization. The expected measure of ultimate realization is the outer limit of the value of the asset.

Whatever value we place on the asset meanwhile it must not lead to an ultimate loss on realization. We commence with its cost price in the books, i.e. the capital or circulating finance invested in it. The result so far is that in the process of production we have expended so much capital upon it. We are so circumstanced that we have the process taken so far. If we were not so circumstanced, we should calculate what it would cost to produce the circumstance. We look at the circumstance and *test* its value by its "reproduction cost." The reproduction cost may be calculated to be (a) equal to the original cost; or (b) more than the original cost; or (c) less than the original cost.

(a) If the reproduction cost equal the present record of cost, the value for balance sheet purposes is apparently as recorded. Such indeed would be the practice subject to one exception, viz. that if such value will, or

is expected to, produce an ultimate loss, the loss must be discounted at once. These assets lead to the realization of the circulating capital (see Chapters I and II) and the circulating capital must be maintained for continuous circulation, so that lost power must be made good out of profits, i.e. by discounting losses at the moment recirculation capacity is found to be impaired (see Chapters II and VI).

(b) If the reproduction cost is greater than the original cost we may not (generally) increase the book value beyond cost because to do so would add a measure of profit not available until realization, and therefore incapable of distribution as dividend meanwhile (cp. Chapter III, paragraph 6). This general rule may only be relaxed in cases subject to definite limitations, and then only if general circulation finance is available to repair the draught on current finance caused by the "anticipation of profits." Thus a builder may apportion some of his profit to work in progress, but it is urged that the maximum limit of such apportionment is the proportion which the advances received (or immediately due) bear to the whole contract price. Similarly, spirits and wines stored for maturity purposes may (some urge) be charged with interest on the capital involved. So far as this is done, circulating capital will be required to finance the effect on dividends meanwhile, but normally recurring items will usually be covered by normal finance.

(c) If the reproduction cost be less than the present cost we note that a realization loss or reduction of profits is promised. Our views of the necessity of maintaining the circulation finance again come into force, and we establish this final rule that the replacement price should be substituted for the higher cost

price. The general rule is, however, subject to exceptions arising as follows—

(i) The replacement cost may be lower through a fluctuation of costs, and thus unlikely to affect the ultimate realization. Such a fluctuation will generally be ignored apart from any sense of over-riding prudence.

(ii) The costs may have been incurred against a contract certain, so that cost is secured by the contract price of the finished process. Here again, cost value may be retained subject to any prudential consideration.

The general practice is therefore to adopt cost price unless a consideration of replacement value or ultimate loss forces other and lower valuation, but never to value above cost except, in special cases, to add mere interest or a carefully measured proportion of a profit certain.

We have used the term "cost of processes" above, to include stocks, stores, works in progress and other costs, but clearly the reasoning applied is more easily associated with physical creations. Other costs of processes, whether (*a*) impressed on the article (direct costs); or (*b*) over-riding its direct costs (indirect costs including a proportion of establishment expenses) may quite properly be treated as assets in the balance sheet at calculated costs (see Chapter II, paragraph 7). It has been said that the application of prudential rules of low valuation of circulating assets tends to be ranked as an accounting virtue, so some measure of secret reserve is generally present in these cases (see Chapter VI, paragraph 11).

3. **Book Debts and Bills.** Book debts fall wide of the cost field, at least so far as they relate to ordinary trade debts. Costs are converted to a realizable form

of wealth and the cost record has been replaced by a record of the conversion. Any profit on the sale is, of course, included in the debt, so that the face value of the debt includes both the capital invested and its profit produce. The face value of the debt is not its *true* value, in theory at least, because there might be made deductions to cover—

- (a) Value of risk of loss in collection ;
- (b) Discount which may be allowed ;
- (c) Costs of collection and record ; and
- (d) Interest during interval to collection.

So far as the debt includes a profit to be collected, we note an anticipation of profit, i.e. a possibility of paying a dividend before the profit has been received. Against this we must remember that a normal volume of book debts (i.e. including the profit quota) is financed by the measure of circulating capital provided, so that there is no reason to double the cover to meet the time lag (see Chapter III, paragraph 6, and note the special considerations attaching to hire sale debtors' accounts).

So far as the amount of book debts may be greater than a normal value, there will arise a necessity for reserve, not merely against the profit but against the costs involved, unless other normal costs (e.g. stock) have been reduced in similar amount.

The other facts of possible deduction in calculation of value are also considerations for reserve, and particularly so is the risk of loss in collection subject to a bad debts reserve (see Chapter II, paragraph 4).

Discounts to be allowed on book debts would seem to demand a reserve according to correct principle, but it may be noted that not the whole of the debtors will earn their discounts. Discounts which are certain of allowance in any circumstances should, of course, be the subject of a full reserve, and more commonly than

not an adequate discount reserve is maintained to cover all possible discounts. It may be, however, that a formal discount reserve is not maintained, but that the bad debts reserve created is considered adequate to cover all risks including discounts.

Book debts are therefore "valued" at face value less any reserves created against them.

Bills receivable are, of course, similar in general to book debts, but are characterized by a more positive condition affecting the time of liquidation with correspondingly more definite possibility as to the calculation of the interest factor meanwhile. It is not uncommon to find the interest discounted by reserve, especially in balance sheets of financial concerns, but nevertheless the general reserves and circulating capital conditions are frequently left to govern the interest factor.

4. Non-trade Debts. Loans are, of course, recorded at their face value as the cost of the debt. Subject therefore to the creation of reserves against risks, it will be clear that cost is the "value" of such debts.

Where debts are raised for the sale of capital assets or any other matter not being the result of a trade cycle, the profit contained should not be retained in the profit and loss account unless the debt is payable before the dividend is paid away. We have seen that in general the profit on the sale of a capital asset will be reserved (see Chapter VII, paragraph 2), whilst the capital itself will stand against the fixed capital fund and depreciation reserves. We may, therefore, value such debts at their face value, though in general the practice is to leave the asset standing on the balance sheet at its "book value" before sale (i.e. the sale entry is not completed until the money is received). Where a capital asset is reduced for sale, the debt may be brought into the books so as to write off the

loss on sale. This loss may be considered, in some cases, a capital loss (Chapter VII, paragraph 6).

5. **Outstanding Income.** Notions of apportionment attaching to expenses (Chapter II, paragraph 7) similarly apply on the opposite side of the account to earnings accruing but not received at the date of the balance sheet, e.g. dividends on interest receivable, rents, etc., accruing. These are valued as accruing from day to day (or other proportionate bases) and entered in the balance sheet. Such items will be covered in the circulating finance provided to finance continuous operations, at least so far as they are of normal volume. Abnormal accruals involve consideration of reserve conditions, whilst prudential maxims of postponing credit will generally find some application in connexion with this class.

6. **Fixed Assets Generally.** The financial expression of fixed assets in a balance sheet follows no principle of "valuation" whatever so far as ordinary routine is concerned. The original entry is, of course, made at cost, and in the best of cases a future date of obsolescence is estimated, so that the cost may be reduced from balance sheet to balance sheet by regular adjustments. The establishment of arithmetic quantities in series from a cost to a residual or zero value cannot be described as valuation procedure, except to say that past value has been apportioned to operations according to certain proportionate factors. A fixed asset may in fact be subject to diminishment of its total utilities, and the exhaustion of those utilities may tend to a series more or less regular in its terms over fractions of the life of the asset. Thus by special pleading we may plead that depreciation is equivalent to an evaluation of lost efficiency, but depreciation is not so calculated, and the depreciation series would be used according to

one of the standard formula, even if any computation of lost utilities resulted in a different graph of progression.

The "valuation" of a fixed asset subject to depreciation, i.e. involving ultimate replacement, is a term between a past cost and an estimate of future fact (see Chapter IV, paragraph 7). The general practice is therefore to state fixed assets at cost less any depreciation provisions made to date.

The "valuation" of a fixed asset not subject to replacement emphasizes the fact of non-valuation. Such assets are not of their nature subject to depletion of their utilities. So far as they have productive value they will generally tend to fluctuation rather than to a regular series. Goodwill does not tend to waste, though it may fade and bloom in turn. It may contract and expand with year to year uncertainty. Similarly, preliminary expenses, foundation advertising, development account, and so on.

In relation to some items such as patents, copyrights, concessions, and so on, there may be a time characteristic so that time apportionment notions may conveniently, but not of necessity, enter into computations of past cost values being partly lost and partly carried forward. The time equation, however, is not conclusive as the loss may have passed into "created goodwill," or be considered to have done so, so that time losses may tend to be balanced by extended potentiality.

We have seen that "depreciation" of non-replaceable assets creates a revenue surplus (Chapter VI, paragraph 9), so that any reduction from cost is a process of reserving profits against non-convertible capital outlay. The net figure of the asset expression is thus not a valuation in any sense.

We note that the "fictitious" assets under present

consideration have generally no realization value apart from the business as a whole. This often results in a demand for reduction of the asset "valuation" over a short term of years, but a consideration of the realization value of plant and machinery and the physical assets would by the same argument involve substantial reduction of these assets in most balance sheets. The completely non-tangible nature of the one type of asset thus results in an emphasis of devaluation demand, and incidentally in the creation of revenue surpluses by contraction of dividends.

7. **Investments Quoted on Stock Exchange.** Where investments are held by finance companies with a view to profit on sale, such investments are of course floating assets and subject to the general rule of valuation at cost or market price, whichever is lower. Where investments are held as investments either as a principal purpose of the business or held against accumulated funds, the investments conform with the definition of fixed assets. In such cases the market value of the investments need not be followed, and a valuation at cost price (less any prudential reserve created) may be entered in the balance sheet. In the case of investments held against capital, it will be recognized that this is the rule applying to fixed assets generally, viz. that selling values do not govern things not intended for sale. Temporary fluctuation of value is, of course, quite negligible, as the book loss may never accrue, but even confirmed depreciation may (apart from prudential reasons) be ignored. Where the investments are held against a reserve or other fund it may be noted that any possible loss may be considered as a shrinkage of the reserve fund, i.e. not necessarily charged to current revenue. The common practice of writing the market value as a

memorandum against the investment is, of course, to be commended.

8. **Investments in Allied Companies.** Investments are sometimes held as part of a managerial nexus between companies. Such investments are, of course, fixed assets; and thus involve no legal necessity for depreciation provision. If the company in which the investment is made be a company controlled by the "holding company," the provisions of Sects. 124/127 of the Companies Act, 1929, become applicable. The material part of these sections for present consideration is that it is necessary to separate any such investments in the balance sheet (Sect. 125) and state how they have been valued (Sect. 124). The sections do not proceed to state any rule of valuation, but Sect. 126 requires the annexation to the balance sheet of a statement showing "how the profits and losses of the subsidiary company have been dealt with in the account of the holding company." There is a need here for the development of a technique for the adequate expression of this type of investment. As a basic consideration it may be noted that if the subsidiary undertaking were not incorporated but merely a department, any loss on its *floating* assets would require to be set against profits of the main undertaking. The incorporation of the subsidiary company, however, turns the whole capital investment into a fixed asset and no loss need be covered as far as the general law demands. It must be remembered also that the holding company's loss on its subsidiary is limited (apart from any liabilities of the subsidiary to the holding company) to the amount of capital agreed to be invested, and also that such loss would be a capital loss (see Chapter VII, Sect. 6). It is at least capable of suggestion that the holding company should reserve against its shares in subsidiary

companies an amount equal to the reduction of the circulating capital of such subsidiary since the time of acquisition of the shares, i.e. the measure it would be forced to reserve from general profits had the subsidiary been a department only of the holding company.

Meanwhile, the general rule of valuation is "Cost less Reserves."

9. **Liabilities.** The quantitative expression of liabilities is, of course, in terms of the demand if the debt is accrued or represents a repayable borrowing. If the liability be a reserve of an expense accruing due at a future date, e.g. dilapidations liability, its statement will be the total of the amounts periodically charged against profits with a view to full accumulation by the time the liability will fall. Time notions of apportionment of the ultimate liability will, of course, receive full play, as the maximum of year to year demands.

Liabilities to be discharged by service will be stated as the fraction of the original consideration which has not been "earned" by service, whether calculated (as usually) on a time basis or otherwise.

10. **Reserves.** Reserves are potential liabilities to the proprietors, subject to the satisfaction of all other demands. They have therefore an ultimate but not immediate financial equation. In the meantime they are subject to the losses which may fall upon them either through loss of assets or revenue, or the incurrence of liabilities in any extraordinary manner, e.g. damage for breach of contract, etc. It may be noted though that any views of valuation taken in relation to any asset or accruing liability must have regard to the reserves. These latter may cover any difference of asset value which otherwise might be urged to involve an adjustment of accounts.

11. **Revaluation.** We have considered in this chapter

the rules applied to valuations in year to year balance sheets interpreting the meaning of "values to the business as a going concern." Revaluation for reconstruction, reduction of capital and absorption involves some measure of real valuations. In such cases the value of floating assets will generally follow the rules laid down for this type (and see also Chapter VII, paragraph 4), whilst fixed assets will be valued with a bias of reconstruction value, but so that the total capital value will be confined to a measure corresponding with the earning power of the business.

This is, of course, a special technique, applicable under special circumstances, and whilst it may appear to some that periodic revaluations might involve a salutary proceeding for more general application, the effect of the adjustments will call for consideration of the matters dealt with in Chapter VII.

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